BUSINESS
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START OF WAR 1939

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TWENTY CENTS . PUBLISHED BY THE McGRAW-HILL



EVERY JAP HAS A JOB

but who wants to live in Japan?

OBODY wants a job—he wants the good things of life a job earns for him.

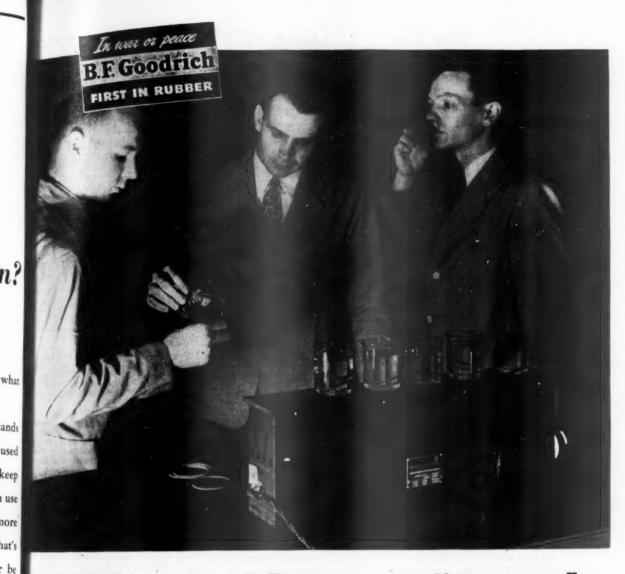
There's too much talk about jobs, and not enough about what those jobs will produce. Even a schoolboy knows that a workman can be paid *only* out of what he produces. A government-created job produces nothing (remember WPA) and so the workman can be paid only by borrowed money which leads only to inflation, in which the workman is the worst sufferer.

But a job in industry creates goods in which the man who makes them can share. The more the workman makes, the more there is for him to share. And machines efficiently used are what enable him to make more.

When this war is over there will be thousands of machine tools, built for war, ready to be used for peace. If government allows industry to keep enough money to buy them, and if workmen use them efficiently, there will be more and more goods for more and more people—and that's the only way jobs and prosperity can ever be created.

The Japanese government has given its people jobs. The American method provides opportunity. Which do you prefer?





Drinking "rubber soup" to make better jar rings

typical example of B. F. Goodrich development in rubber

I LOOKED like a hungry winter. Food jars need sealing rings to keep the of from spoiling—but there weren't y. Natural rubber wasn't available, d canneries found that rings of syntic rubber gave the food a bad tasted odor.

ple

Engineers of B. F. Goodrich were ted to solve the problem. By careful periment, they learned why syntic rubber caused the tastes and ors. They took out those ingredients t since each batch of synthetic rubt varies slightly, there was no posi-

tive way to tell that the bad taste and odor would not turn up again.

It looked like a tedious situation but B. F. Goodrich men kept on working. From each new batch of synthetic rubber they made a few rings. These were boiled just like a jar ring is boiled in canning. Then several people tasted the water. If no taste, that batch of rubber was made into jar rings; if a bad taste, it was used for something else.

It solved a problem that no one else had solved—and made possible the manufacture of millions of jar rings without which thousands of tons of food might have been wasted.

There is scarcely a day that doesn't see some problem solved by B.F. Goodrich research. There are no rules in the large development department here except one—make it better. Perhaps that explains why there have been so many revolutionary improvements in belting, hose and other B.F. Goodrich rubber products. The B.F. Goodrich Company, Industrial Products Division, Akron, Ohio.

B.F. Goodrich

RUBBER and SYNTHETIC products



One of the unconventional but useful handling jobs often performed by battery industrial trucks is to push or pull heavy loads between craneways. Articles describing modern methods of material handling appear regularly in our STORAGE BATTERY POWER. Send for sample copy if you do not already receive it.

BECAUSE they are quiet and free from fumes, battery industrial trucks can be used without restriction in virtually any department of the plant. They can even be provided with spark-enclosed construction for operation in locations where fire and explosion hazards may exist.

They use low-cost electric power, and they use it with maximum economy, because they start instantly, yet consume no power during stops. With electric-motor drive for both traction and lifting, they have a minimum of wearing parts; are easy to maintain; are rarely out of service for repairs.

Thus, they are inherently dependable and economical, and this is especially important in the war industries where they are working 24 hours a day. Here they have the additional advantage of operating from one battery while another is on charge; except for the few minutes needed to exchange batteries, they need not stop for servicing of the power unit.

They are extra dependable and



extra economical when Edison alkaline batteries are used. With steel cell construction, a solution which is a natural preservative of steel, and a fool-proof principle of operation, they are the longest-lived and most durable of all storage batteries. Edison Storage Battery Division of Thomas A. Edison, Incorporated, West Orange, N. J.

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WHERE TO FIND IT
Canada
Figures of the Week
Finance
General News
Labor
The Labor Angle
Marketing
The Markets
New Products
The Outlook
Production
The Trading Post
The Trend
The War and Business Abroad.
War Business Checklist
Washington Pullatio
Washington Bulletin

THE PICTURES

Cover—Bachrach; 15, 16 (upper)—Pres 16 (lower), 17—Harris & Ewing; 18—U Army; 19—Wide World; 21—British Com 22-Los Angeles Times; 94-Milwaukee Jo

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WE VASHINGTON BULLETIN

HEARSALS

Officials all over Washington—in War bilization Director James F. Byrnes' ce, in the Army and Navy, in WPB—running through rehearsals of their Day plans. Few of them showed on any golf courses last Sunday. "standby" is being kept very quiet, officialdom generally, like the citi-

Meanwhile, inflated war production edules which the military had bulled ough (BW-Feb.24'45,p5) as insure against a home-front letdown foling V-E Day are being shaken into ter, in line with the warning of land G. Batcheller, WPB's Chief of perations, that "we are bumping a duction ceiling" and that "cuts in plies available for war-supporting and ential civilian activities have already en carried to a point where any furer widespread squeeze will probably sult in reducing, rather than increase, total munitions output" (page 9).

AN FOR GERMANY

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Assin

Van V ds • Cl Stanley In a week in which ears were strained r whispers about surrender terms aced in the hands of German capitution emissaries, Washington also listed for official details on a plan for bold new approach to the postwar conomic control of the Reich (The Var and Business Abroad—page 111). his was identified as a three-way effort a satisfy the proponents of a hard eace, assuage fears that widespread iscontent will make Germany a breeding ground for a third war, give the sussians a sample of the efficiency and ealism of capitalist economic management.

RE-EQUIPMENT"

One result of the quiet but intensive Washington emphasis on V-E Day planning has been an explanation of hat recent string of vague statements about the necessity of "completely requipping" the forces that are to be transferred from Europe to the Pacific. Here's what they come down to: Reserves held in Europe can be shipped immediately. The bulk of equipment that has been in use there will have to be repaired or reconditioned—there or here. This will take more time than will be needed to move the men who have been using it. It won't be until

the second six months after the end of Germany that war production here begins to feel the main effects of transfers from the European theater.

Production Pattern

The Army has worked out a V-E Day pattern of demands that breaks war production down into four main categories (without, of course, revealing what items are included in which category)

Depending on what you make, you can expect: (1) an immediate reduction for six months, then an increase; (2) a big increase for the first six months, followed by a decrease; (3) a small increase for six months followed by a big one; (4) a steady demand all the way through.

Of course, some items will decrease from V-E Day on, but the Army continues to take a grim view of the length of the Pacific supply line and of the prospective job of supplying troops scattered over several fronts, each one of which will have to be more or less self-sufficient.

DOUBLE-TALK ABOUT BEEF

Charges by Lt. Col. Ralph W. Olmstead of the War Food Administration that the U. S. has asked for Canadian beef and was turned down, and by Canada's Agriculture Minister J. G. Gardiner that a Canadian offer of live cattle last fall was cold-shouldered by both WFA and U. S. packing houses, relate to very specific individual situations and contain much double-talk.

General policy—on which this country and Canada are agreed—has been that Canadian exports to this country should be kept at a minimum during the war. Canadian export of meat to the U. S. at the same time that the U. S. is lend-leasing meat to Great Britain (pages 17, 111) would have obvious repercussions.

RAIL-RATE DECISION

The Justice Dept. is jubilant over the Supreme Court's 5-4 decision this week allowing Gov. Ellis Arnall of Georgia to file a complaint charging 20 railroads with conspiracy to maintain freight rate discrimination against his state (BW-Jun.24'44,p41).

The court majority not only decided to deal itself in on the north-south differential controversy but also indorsed the stand that antitrust attorneys have taken in their pending suit against the western railroads (BW-Sep.9'44,p32) and their rate-fixing methods. Railroad attorneys glumly agree that the court has tipped its hand on both cases and that the hand looks bad for the railroads.

The Interstate Commerce Commission, which has been brooding over the rate differential question for months, probably will order a substantial amount of equalization long before the Supreme Court winds up its case. Railroads had expected this, but they are afraid now that the ultimate effect of the court's decision will be to abolish the present system of collective ratemaking through tariff bureaus.

CURFEW'S KNELL

The curfew is so unpopular and has caused so much embarrassment in official Washington that War Mobilization Director James F. Byrnes will junk it after V-E Day. Other government agencies would shout with relief if he'd do it now.

After fumbling for weeks with the curfew enforcement problem, officials have arrived at a method which they will apply to persistent violators if necessary.

Curfew violators who ignore War Manpower Commission orders to reduce their personnel to a maintenance force will encounter WPB's priority and allocation powers. This means cutoff at the premises of water, gas, electricity, and telephone service, but only after hearings, findings of fact, and issuance of a suspension order.

NEW ACCENT ON TACT

Public resentment over civilian crackdown measures is causing concern in Washington, prompting some repair work on the military's public relations. Note, for example: Maj. Gen. Lucius D. Clay of Army Service Forces, who has been War Mobilization Director James F. Byrnes' No. 1 deputy for several months, will join Gen. Eisenhower as Deputy for German Civil Affairs.

Col. Bryan Houston, whom OPA once borrowed from the Army to make rationing more palatable, is being given wide latitude in an attempt to put a better light on Army procurement operations. Perhaps this will result in some bending of present stiff-arm tactics. Be-





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Steaks, loins, roasts and other food supplies are too precious to risk possible spoilage through refrigerated storage space failures! The PENN Auxiliary Alarm Contact acts as a guardian for these supplies

... warns whenever temperature rise is abnormal.

This auxiliary alarm contact structure is available in all standard temperature and pressure controls...provides extra protection for deep freezers and commercial low-temperature boxes. Its operation is simple. A rise in temperature above the predetermined safe maximum causes the contacts to close...ringing a bell, flashing a light or other warning device.

This is but another example of PENN ingenuity and manufacturing skill...ingenuity and skill that have meant better controls not only in refrigeration, but in heating, engine, pump or compressor service as well. If you have an automatic control problem... consult PENN

for the correct solution. Penn Electric Switch Co., Goshen, Ind.



AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSOR

ASHINGTON BULLETIN (Continued)

e war, Houston was a top execuof Young & Rubicam advertising

DITIONAL ALUMINUM

help meet the increasing demands Jominum, Metals Reserve Co. will hase an extra 250,000,000 lb. from da during 1945. WPB prefers this opening domestic potlines in the of current manpower shortages. he arrangement will have the inci-al advantage of helping the Canapay off the money advanced them in the war for expansion of aluum facilities.

AGNER VS. GIANNINI

mancier A. P. Giannini and his nsamerica Corp., which controls is of America (BW-Jan.27'45,p72), the real targets of the bank holding many bill introduced this week by ate Banking Committee. Wagner's and the companion piece spond by Rep. Brent Spence in the g, would forbid bank holding comis to engage in nonbanking activiand would force them to get rid of banking interests.

The resort to Congress climaxes a g tug-of-war between the ebullient mini and the board of governors the Federal Reserve System over samerica's ventures outside the nking field-for instance, the acquising and subsequent resale of Axton-ther Tobacco Co. (BW-Aug.7'43, 0). The board has limited powers bank holding companies under the aking act of 1933 but hasn't been e to keep Transamerica from fanning t in banking and nonbanking lines.

DVOCATE AND JUDGE

Charles R. Denny, Jr., confirmed by e Senate Monday for membership on Federal Communications Commis-, faces a dual role—that of advocate d judge, in the forthcoming radio ectrum allocations.

As the commission's general counsel, any has conducted the allocation proedings and advised the commission. commissioner, he will be called upon judge whether FM (frequency moduon) can better serve at 42-50 megacles (present location) or whether it hould be moved upward to 84-102 mc.

TRUMAN: LIAISON MAN?

The Administration appears to be giving Vice-President Harry S. Truman a mild build-up. Several inspired pieces have lately been finding their way into the press stressing the activity of Henry Wallace's successor as an intermediary between the Senate and the White House. Emphasis is put on the fact that his attendance at cabinet meetings serves to keep him on the inner level of high policy

It is suggested that as the Senate's presiding officer, aided by his cordial relationships, he will play an important tactical role in helping to pilot the United Nations charter through the upper house this summer.

That Roosevelt is grooming Truman

That Republican Redemption Plan

It is becoming increasingly evident that, at the end of the United Nations conference at San Francisco, there is a pot of gold waiting for the Republican Party.

It's political gold. Not all Republicans see it-but it's there, and there are many influential Republicans who do. Sen. Vandenberg sees it. Gov. Dewey, Commander Stassen, and others see it.

• The Big Chance-They see, in the Senate vote on the United Nations charter, a golden opportunity to shed completely and conclusively the party's whole past record of political isolationism.

They see, at long last, the perfect opportunity to take foreign policy so substantially out of political con-troversy that the 1948 presidential election would have to turn on domestic issues.

• On the Record-Some Republican leaders are saying privately that this opportunity can conceivably mean the life or death of the G.O.P. Here's

how they put it:

A political party's past voting record, not the pledges of its platform nor the declarations of its presidential nominee, largely determines how the country believes it will perform in the future.

In the past two national cam-paigns—in 1940 and 1944—the Re-publican isolationists' voting record in Congress, from Harding to Hitler, proved more persuasive to the election voters than the internationalist words of the platform or the internationalist pledges of the candidates. • An Issue at Hand-The G.O.P.'s great political problem is how to wash out this record. As Willkie and Dewey proved, words alone won't do it; the only way to wash out one voting record is to create another. Some Republicans have been slowly building that record, but they have not been numerous enough and the issues have not been great enough.

It takes a vital, transcendent, historically great issue to enable a major party to wipe out a 20-year voting record in one roll-call.

The Senate vote on the ratification of the charter which will take the United States into the organization of United Nations is exactly such an issue. On this, the Republican Party can, by near-unanimous action, lift the onus of an isolationist past entirely off its back; or, by a divided vote, saddle its next presidential nominee with the same old political

• To Get Back Home-The G.O.P. leaders who are saying this have been convinced by the election returns that, unless the people can vote for full-bodied internationalism and domestic conservatism through the Republican Party, they will vote for full-bodied internationalism through the party which really offers it-and hope for the best domestically.

Some of these leaders go on to contend that what is really involved is the opportunity for a conservative party to carry on its historical role in American politics. They see the country's strong conservative elements denied an effective party if the Republicans do not, this time, convincingly demonstrate their trustworthiness on foreign policy and thus free themselves to center the next presidential campaign on domestic issues. They conclude that, if party members in the Senate vote decisively to ratify the United Nations Charter, the G.O.P. will take the monopoly on peace policy from the opposition and again enable internationalists to cast a fearless Republican ballot. This is the pot of political gold in the offing.



Put Your Post-War Plant in MAINE

• Are you planning to establish an Eastern branch to better your competitive position in the post-war struggle for domestic and foreign markets; or to launch a new business enterprise? Then, consider the many advantages of a plant location in Maine.

• A look at the map will reveal some; our nearness to the largest domestic markets for both consumer and industrial products; our location on the direct air-cargo routes to Europe; the direct line by water from our seaports to major South American markets; our splendid transportation facilities; our many raw materials resources; our vast water and electric power supply.

• There are other factors equally inducing; the State's encouragement of business enterprise in the American manner; our tax structure and sound financial condition.

• Compare with any other area the traditional ingenuity and resourcefulness of our workers which makes them craftsmen in anything they do; their understanding of management problems; their high standard of living and healthful recreational opportunities which make for contentment.

• Then think of yourself and the environment in which you and your family can live, in an American community, rich in cultural, educational and religious advantages, with all "Vacationland" at your doorstep.

• This book describes the many advantages of locating your business home in Maine. Let us send you a copy and, if you just ask, help you find a factory site or existing plant facilities that can be economically converted to your needs.



to take over the presidential mantle is a premature supposition—to say the least. At most the current build-up could be no more than a preliminary heat calculated to see how well the new Vice-President grasps the opportunities given him and whether he can win a personal following.

Truman will find a friendly hand at the White House, but he will be pretty much on his own.

TOOLS TO BE RETURNED

Defense Plant Corp. finally has wangled everyone's approval for its long-pending plan to dispose of surplus government-owned cutting tools by returning them to the original manufacturers.

Under DPC's proposal, the manufacturers will take back the tools, recondition them, and feed them out with their own sales in a one-to-four ratio, receiving a 17½% commission for their pains.

CAPITAL GAINS (AND LOSSES)

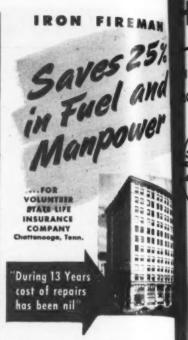
May 14, when the Seventh War Bond Drive starts, will be B-Day for the country's retailers and during one hour of that day (you guessed it, B-Hour) all stores will halt sales of merchandise, sell only war bonds.

The Justice Dept. brought a civil suit this week against the Hartford-Empire Glass Co., asking, as predicted (BW-Feb.17'45,p7), for cancellation of four glass machinery patents, alleging that the patents were fraudulently obtained. This course was suggested by the Supreme Court when it held that the antitrust laws can't be used to nullify patent rights (BW-Jan.13'45,p20).

-Business Week's Washington Bureau

THE COVER

To 51-year-old John L. Collyer, president of B. F. Goodrich Co., goes the job of blasting out more tire production to keep pace with the insatiable appetite of the war machine, to prevent essential home-front travel from bogging down. Just appointed special director of rubber programs of the War Production Board, Collyer has requested only a three-month leave of absence from his home office to get the wheels going. He has carte blanche authority, is at liberty to take whatever steps are necessary through WPB, OPA, War Manpower Commission, Defense Plant Corp., the Army, the Navy, and other agencies which are trying to remedy the present emergency-or are contributing to it (BW-Mar.24'45,p21).



THE record of Iron Fireman stolar in thousands of installations of be ignored only by those who a indifferent to high costs. For 13 yes Volunteer State Life achieved so important savings in fuel, labor as maintenance that they decided to it stall new, improved models to replate the old Iron Fireman stokers. "We fee that our heating operation is assum for the next 20 years," says Mr. E. Kittrell, building manager.

Iron Fireman provides a steady, a pendable steam supply exactly suite to the load demand. With its clear incandescent fuel bed and its preciautomatic control of fuel and air, in Fireman makes coal firing a scient

rather than an art.

Ask for Survey of YOUR Heating Pin

The Iron Fireman engineering organization, largest in the stoker industry will make a free survey of your bold room and tell you exactly what Iron Fireman can do for you. Write to Iron Fireman Manufacturing Company 3728 W. 106th Street, Cleveland II. Ohio. Nationwide sales and service

Plants in Portland, Ore.; Cleveland, Ohio; Toronto, Cass



IRON FIREMAN COAL FLOW STOKER saves laber ly feeding direct from main coal hunker. Ne manual on handling. Automatic fuel and air controls maintain efficient combustion, regardless of load fluctuaties

E OUTLOOK

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The preliminary victory in Europe has been won, as Gen. Dwight Eisenhower informed the world on Tuesday; Germany is as good as out of the war.

This poses anew the all-important question of how long it will be until Japan, too, will fall, and what is to happen to U. S. industry meanwhile.

Last autumn we figured approximately twelve months between the end of the two wars, with the Nazis going down before the year-end. The German war has been prolonged. Meanwhile, the struggle in the Pacific has been getting further and further ahead of schedule.

Will it still be a year between the end of the two wars?

Our Navy, always confident, now is cocksure of its ability to polish off its end of the Pacific war (even though it may not be positive on the timing).

This sureness was demonstrated this week when the Navy canceled 72 of the 84 combat ships in a program announced less than a month ago.

These 84 ships were to have been "insurance" in the Pacific. Only twelve escort carriers—150,000 out of the projected 636,860 tons—will be built.

The Japanese fleet units caught by our carrier aircraft in Nippon's Inland Sea must have been pummeled to everyone's complete satisfaction.

Army has no such overwhelming superiority as Navy in the Pacific. Of our identified combat divisions now in action, about a quarter are fighting the Japanese—some 20 out of 80.

In addition, there are at least five Marine divisions. Then, too, there is a large British force in Burma which might be shifted to China.

Just about our only shortcoming in the Pacific has been our inability to provide all the men the Army says it needs to chase the Japanese out of Asia and to invade their home islands.

Most of these men would have to come from Europe; no matter what portion of their supplies can be shipped with them, more must be manufactured here in the United States (page 5).

If we, indeed, require huge ground forces in Asia, then prolongation of the war in Europe has delayed redeployment—and reconversion.

Perhaps, on the other hand, Army is overstating its needs. In that case, Nimitz and MacArthur have paved the way for larger and swifter demobilization and cutbacks than anyone in Washington now admits.

Prospects of increasing war production—assuming large needs in the Pacific—aren't too rosy. We can produce only so much.

If Selective Service overdraws on manufacturing technicians—or even common labor—war output suffers. If the domestic economy is pinched too tightly, war plants lose women who can't find anyone to mind their babies or do their laundry.

Beyond all else, constant changes in munitions programs (no matter how necessary) nullify industry's ability to increase output per man-hour. Obviously, productivity soars toward the practical limit of efficiency for a period after starting work on a new item. But that's only a matter of climbing back up to where you already were.

Cold statistics (newly refined) prove that we have not done as much with our manpower as we were lulled into thinking we had.

Out-of-date figures (derived by sampling the employment in key plants)

THE OUTLOOK (Continued)

BUSINESS WEEK MARCH 31, 1945 indicated that factories added some 2,500,000 wage earners between January, 1942, and the peak in November, 1943. Corrected figures (taken from the actual Social Security rolls) show a rise of almost 3,250,000.

In short, gains in war production during those 23 months were achieved with about 700,000 more workers than we thought we had on the job. Figuring 44 hours a week, this means more than 30,000,000 additional man-hours weekly in factory employment, most of it on war work.

Estimates of increased productivity thus must be washed down to the extent that the real factor in the 1942-43 output rise was more hands.

War production declined, between November, 1943, and February, 1945, by about 10%, and that more or less matches the drop in employment.

In other words, changes within the program must approximately have canceled out any increases in over-all efficiency. It is doubtful that we can even come close to the rise of nearly 15% scheduled for munitions output between now and July.

"Critical" and "must" programs are being pushed at the expense of noncritical. We can and will step up output of these emergency items.

Yet each time output of a critical munition is raised, it seems to throw something else out of balance—to make something else a must. This would not happen if we had created a pool of workers through widespread increases in productivity.

The idea that we have any efficiency-freed manpower is proving a mirage. And those believing in the mirage might as well turn and face facts.

The statistical error that has been corrected in the 1942 and 1943 manpower figures cannot yet be corrected for 1944 nor for 1945 projections for lack of up-to-date Social Security records. We almost certainly are employing more people on war jobs than uncorrected totals show, their productivity is less than indicated, and there is no slack.

This rigidity is as important to reconversion after V-E Day as it is to war output now: If there is no slack, there can be no reconversion until the armed services agree to sharp cuts in war production.

WPB admits the realities of the manpower situation, noting in its report on February output (which was 2% below schedule) that "it is obvious that we are bumping up against a production ceiling."

The report reveals, by the way, that critical programs in the aggregate ran 6% below schedule in February.

Such deficits must be carried forward. Deficits in items that are being made largely for the Pacific must be carried forward even after V-E Day. That is another hurdle in the way of reconversion.

Moreover, the scheduled rise is staggering in two big items for the Pacific—critical aircraft, due to go up 134% between now and December, and Navy rockets which are ticketed for a 290% rise.

Easter buying plus the fairly evident consumer rush for a growing variety of scarce goods (BW—Mar.3'45,p10) pushed March department store sales to a record high after due allowance for seasonal factors.

The March gain in dollar volume for the country, when all returns are counted, probably will come very close to 25%.

Mind you, this record volume was rung up in income-tax month.

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PAGE 10

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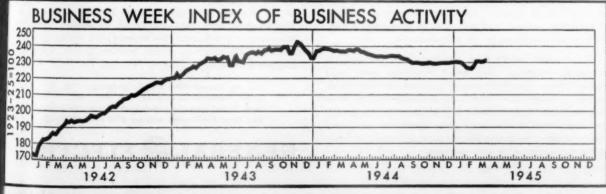
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IGURES OF THE WEEK

assessment to the second	§ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
E INDEX (see chart below)	°233.0	†232.1	231.7	230.9	237.9
DOUCTION					
1 Input Operations (% of capacity)	96.6	96.9	94.6	95.1	99.1
Lastion of Automobiles and Trucks	20,480	20,505	21,015	20,880	17,725
agineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$5,980	\$6,050	\$5,208	\$5,127	\$5,680
Jectric Power Output (million kilowatt-hours)	4,402	4,398	4,474	4,377	4,409
rude Oil (daily average, 1,000 bbl.)	4,782	4,774	4,778	4,744	4,385
huminous Coal (daily average, 1,000 tons)	1,971	+1,814	1,931	1,949	2,012
ADE					
fiscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	86	80	82	86	81
Other Carloadings (daily average, 1,000 cars)	50	47	48	63	50
foney in Circulation (Wednesday series, millions)	\$25,836	†\$25,881	\$25,652	\$23,558	\$20,934
peartment Store Sales (change from same week of preceding year)	+24%	+28%	+24%	+9%	+17%
usiness Failures (Dun & Bradstreet, number)	14	16	14	24	30
CES (Average for the week)					
oot Commodity Index (Moody's, Dec. 31, 1931 = 100)	255.2	255.3	255.1	250.5	251.1
ndustrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100).	166.4	166.4	166.4	165.7	163.2
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100).	226.7	226.3	225.7	223.5	222.2
mished Steel Composite (Steel, ton)	\$57.55	1\$57.55	+\$57.55	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton)	\$19.17	\$19.17	\$19.17	\$17.00	\$19.17
Copper (electrolytic, Connecticut Valley, lb.)	12.000€	12.000€	12.000e	12.000€	12.000€
Wheat (No. 2, hard winter, Kansas City, bu.)	\$1.67	\$1.66	\$1.67	\$1.55	\$1.66
figur (raw, delivered New York, lb.).	3.75e	3.75é	3.75€	3.75e	3.74e
Cotton (middling, ten designated markets, lb.)	21.73¢	21.75¢	21.70e	21.47e	21.16e
	\$1.340	\$1.340	\$1.340	\$1.323	\$1.313
Wool Tops (New York, lb.)	22.50€	22.50¢	22.50¢	22.50e	22.50¢
Rubber (ribbed smoked sheets, New York, lb.)	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢
IANCE 0 Stocks, Price Index (Standard & Poor's Corp.)	107.8	110.9	112.6	100.8	95.8
fedium Grade Corporate Bond Yield (30 Baa issues, Moody's)	3.38%	3.38%	3.39%	3.56%	3,70%
ligh Grade Corporate Bond Yield (30 Aaa issues, Moody's)	2.60%	2.61%	2.64%	2.72%	2.74%
	1.00%	1.00%	1.00%	1.00%	1.00%
all Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
NKING (Millions of dollars)					
	27 505	27 625	26 627	25 522	22.060
emand Deposits Adjusted, reporting member banks	37,585	37,635	36,637	35,522	32,860
otal Loans and Investments, reporting member banks	58,071	58,155	58,753	54,766	52,401
ommercial and Agricultural Loans, reporting member banks	6,155	6,186	6,313	6,055	6,370
curities Loans, reporting member banks	2,754	2,830	2,977	2,452	2,446
S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks.	43,774	43,799	44,105	40,860	38,329
ther Securities Held, reporting member banks	3,013	2,937	2,955	2,960	2,897
rcess Reserves, all member banks (Wednesday series)	1,100	1,000	900	878	926
otal Federal Reserve Credit Outstanding (Wednesday series)	20,173	20,296	20,003	17,237	12,722
liminary, week ended March 24.	* D	& Date for "Latest Week" on each series on request,			





More Than Equipment

• At the Plastics Divisions of the General Electric Company there are full facilities for every type of molding job—fine modern equipment for fast economical mass production molding. Special machines cut complicated mold shapes with swift accuracy, preform compounds, unload wedges, ease or eliminate a hundred other operations in the manufacturing cycle.

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Hear the General Electric radio programs: "The G-E All-Girl Orchestra" Sunday 10 P.M. EWT, NBC. "The World Today" news every weekday 6:45 P.M. EWT, CBS. "G-E House Party" every weekday 4:00 P.M. EWT, CBS.

GENERAL (22) ELECTRIC

BUSINESS WEEK

NUMBER 813 MARCH 31, 1945

oremen Get a "Go-Ahead"

NLRB reverses earlier ruling, orders bargaining election repackard supervisors, upsetting traditional pattern of American dustrial management. Companies will contest decision in courts.

The wartime drive to unionize foreen, traditional base of the manageent pyramid in American industry,
t a powerful boost this week when
e National Labor Relations Board
versed itself and decided that unions
supervisors are entitled to all the
ments of the Wagner act. Until now,
reman unionism has had to resort to
itses and other economic pressures to
memployer recognition because it
d been denied the election and cerfeation privileges of the law.

Widespread Repercussions—The first rect beneficiary of what is certain to come one of NLRB's most hotly consted decisions is the Foreman's Assn. America, the union of supervisory ployees which was launched a little et three years ago in Detroit (BW—pt.17'43,p102).

In addition to F.A.A., the powerful of in the arm which NLRB gave the ovenent to unionize foremen willing almost immediate benefits to ch diverse labor groups as John L. ewis' catch-all District 50, which ants to represent coal mine supervisors; ounions of all types in the retail field hich have been trying to organize store add department managers; and to a host

A.F.L. and C.I.O. organizations. Packard Affected First—The first concern to be directly hit by the board's bout-face is the Packard Motor Car bo, whose 1,100 foremen were involved the case NLRB used in promulgating s new doctrine (BW-Jan.20'45,p98). The board ordered a collective baraning election at Parkard within 60 ays, so that the eligible supervisory orkers may decide whether they want be represented by F.A.A. or by no mion.

ard

If they vote for F.A.A., Packard will are no recourse except to sign a conact with the foreman's union because courts have long held that collective argaining must result in a written greement. Of course, Packard might by to upset the ruling by an appeal to be courts, but it is unlikely that a but decision could be obtained in the days preceding the election.

In addition to Packard is a long line firms in auto, steel, shipbuilding,

electrical manufacturing, and other key industries which can expect to be faced with demands for recognition from

organized supervisors.

• Tradition Overturned—There is no doubt that, unless NLRB's Packard decision is changed by judicial action or legislative enactment, United States industry is on the verge of a revolution

in its traditional management pattern.

From NLRB's point of view, its ruling takes the board off the hot spot it was on whenever strikes resulted from its refusal to entertain petitions for recognition from supervisory organizations. The board might land on a hotter spot, however, when it is drawn into the inevitable contest over its award which powerful industrial groups can be expected to launch in Congress and in the courts.

• Board Divided—That the board itself will not go into that fight united is clearly indicated by the bitter dissent written by Gerard Reilly, one of its members.

Reilly not only stood firm against



PEOPLE ON THEIR WAY HOME

Fast becoming a major problem for Allied armies battling through the Reich is the seemingly endless stream of "imported" workers (above) being liberated by the advance. Of an estimated 9,000,000 persons taken into Germany to overcome an acute labor shortage, only a small percentage has been freed—but enough to overtax military relief setups and existing facilities of the United Nations Relief & Rehabilitation Administration (BW—Mar.17'45, p114). Being funneled into refugee centers, the liberated workers not only must be fed, clothed, and sheltered, but must be filtered through investigating boards before being returned to their homelands. And their homecoming has important economic as well as social aspects. Many, key workers in homeland industries, will be important in restoring national economies.

the reasoning of Chairman Harry Millis and John Houston, but made it even more difficult for them to defend their position by raising an extraneous issue. He suggested that NLRB ask Congress for legislation to enforce sanctions against unions-a proposal which is certain to be advocated by groups which

want to prevent the board from implementing its Packard ruling.

• Houston Shifts Position-NLRB's Packard decision was a reversal of the stand it took in the Maryland Drydock case (BW-May15'43,p90)-and that decision was itself a reversal of the policy set in the Union Collieries case, when

the independent union of mine un visors was certified as bargaining as In the Maryland Drydock case, i ton, then new to the board, had i with Reilly in ruling that foremen or not be certified as an appropriate for bargaining.

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This meant that the F.A.A. and on

FORECAST: CONTINUED PARLEYS AND UNSETTLED



Regardless of this week's showdown in the long-threatened coal mine strike, negotiations must go on between the bituminous mine operators, and John L. Lewis (below left) and his union representatives-who conferred fruitlessly in Washington for a month before the crisis.

From this group (above)-with Ezra Van Horn keeping peace between the unionists on his left, the operators on his right-must come the final word. They are the men who must agree before any coal contract is signed for 1945.

The Conciliation Service of the Dept. of Labor may yet play a vital role in securing that agreement, but throughout the month of March representatives of the service simply

cooled their heels outside the Washington conference room waiting for the call that never came.

Hat in hand (below right), the two bided their fime and learned what happened inside only from informal chats with such conferees as Lewis' top lieutenants (left to right), Thomas Kennedy, John O'Leary, and John Owens.





sons of supervisors could not avail maselves of the election machinery set by the Wagner act. Individual foreman who claimed that they were disminated against because of union wity could, however, seek the protion of that part of the law which as unfair labor practices. Because this I-in, half-out arrangement impressed uston as being unenforceable, and cause of numerous foremen strikes him the past year, he shifted his to favor full Wagner act coverage

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Not Policy Makers—In explaining its aged opinion, NLRB's majority dened that foremen in mass-production instries had ceased to be policy-makerofficials in their companies and had come mere production "traffic cops." The decision did not place any rejetions on the kind of union a forem can belong to, but it is evident at NLRB will not stand for superary unions that are tied in directly the rank-and-file unions—a point which ust be clarified.

But Reilly pointed out in his dissent at the independent union of mine pervisors, which gained recognition the old collieries case, subsequently filiated with the United Mine Works. It should be noted, however, that hn L. Lewis' foreman members have marate locals.

Unanswered Questions—NLRB's desion raises the question whether the card will need to set up an "antitrust ivision" to outlaw certain union commations as in restraint of management. Moreover, NLRB's decision poses another neat problem: Are the foremen's mions entitled to maintenance-of-memership protection?

In the case of the coal supervisors, wis may be expected to insist on othing short of a union shop, once he as established his "autonomous" Disnict 50 as the representative of a majorty of the foremen.

What About Ford?—The ruling cretes a special situation in the automoble industry because the Ford Motor Co. signed a contract with the Forenan's Assn. of America at a time when other auto manufacturers were appearing before congressional committees tecking legislation to make unionization of foremen, with or without Wagner ect protection, illegal.

The Ford foremen's contract is not much of a compact, as union agreements go, but the NLRB decision may affect it. When its contract with Ford tomes up for renewal the foremen's group can go to the National War Labor Board and demand better conditions, while simultaneously pushing their organizing drive with the other manufacturers.

Food Pinch Is Tightening

Congressional investigations of scarce supplies hasten official action to reassure public, but civilians won't get more because military and lend-lease always take up the slack.

In Washington the big stew over food shortages was no longer simmering

this week; it was boiling.

A Senate Agriculture subcommittee opened hearings which have already given cattlemen, meat packers, and OPA a chance to hurl charges and countercharges. On the other side of the Capitol, the House is warming up for a similar inquiry. President Roosevelt, who has recently held aloof from purely domestic problems, has been forced to take a hand in the crisis.

• Dividing the Blame—This general airing has hastened official action to ameliorate the shortages. Congressional and executive probing also is laying some of the blacker rumors of famines yet to come. As a result, there is a general division of the blame which may help clear the air of interagency sniping.

But so far as the immediate future is concerned, all this can't add a single pork chop to the U. S. food supply.

• Official Reassurement—Statements by the President, War Food Administrator Marvin Jones, and Office of War Information Director Elmer Davis are designed simultaneously to assure the country that no over-all shortage is in sight and to condition the public to sharing the U. S. supply of certain scarce items with the starving populations of other countries in the interests of "decency" (the President) and "practical necessity" (Jones).

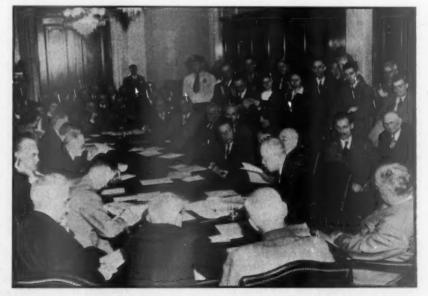
As far as the country's over-all food supply is concerned, official statements can be taken largely at their face value. The U. S. is still a long way from hunger.

• Higher Than Prewar—Total U. S. civilian food consumption last year was 9% above prewar (1935-39) levels, in 1943 6%. This year, it will probably be about what it was in '43, maybe a little lower.

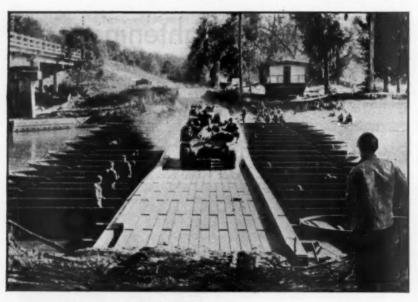
There will be plenty of grains and cereals, a good supply of fresh fruits and vegetables (particularly if present expectations of more than 20,000,000 Victory gardens are realized), almost all the milk people can drink.

• The Short Items—There won't be enough—or anything like enough—meat, sugar, butter, cheese, fats and oils, and canned goods. Poultry will continue scarce (BW—Mar.24'45,p24). Eggs will be scarce (page 86) because of the demand for them as a meat substitute.

U. S. criticism has smoked out a declaration by Winston Churchill on Britain's emergency stockpile. Wash-



Bending over his notes, Wilbur La Roe, Jr. (right), counsel for the National Independent Meat Packers Assn., unleashes before the Senate Agriculture Committee a frontal attack on OPA, which he blames for the meat shortage.



LIGHT BRIDGE OF LIGHT METAL

Developed to handle the ever-increasing weight of military equipment, the Army's new all-aluminum floating bridge is being rushed from tests (above) to action. Comprising but three main parts-pontons, hollow decks, and removable gunwales—the span is so simple in design that a 301-ft. section was set up in slightly more than two hours in the first service test. Since then 45 min. have been knocked off that time. Made by eight companies, the pontons come in half sections, each 30 ft. long and weighing 1,700 lb. They are locked stern to stern to form a complete unit capable of supporting 26 tons. The decking itself is buoyant enough to support a loaded truck if all pontons are sunk. Carried in 69 trucks and trailers, an M-4 bridge set provides 616 ft. to be used primarily in the attack-following up a crossing of assault boats. It is replaced quickly by more permanent spans, then moved up again.

ington is inclined to accept Churchill's statement that this now amounts to only around 6,000,000 tons (against a rumored 700,000,000) and is being rapidly reduced by relief shipments to liberated areas. (Comparison indicates that the per capita British meat-fatscheese ration somewhat exceeds that of the U. S., besides being better distributed. But this country has the advantage of far more milk and eggs, a more varied diet generally.)

· Military Takes Up Slack-The secondquarter lend-lease shipment of meat to Britain has been slashed from over 200,000,000 lb. to a token 25,000,000 lb. Canada has belatedly come forward to make up the difference (page 111). The slash in lend-lease has already been gobbled up by the military, hence will bring no visible relief to civilians.

Military stockpiles have likewise evaporated. Civilian officials regard somewhat skeptically the statement of Under Secretary of War Robert P. Patterson that the Army's supply level "is now below the minimum safety factor." But they concede that the military has only working inventories, not stockpiles.

· Millions More to Feed-The revelation that the Army must feed several million mouths in addition to our own soldiers came as a surprise to many U. S. civilians. Official estimates that the Army feeds a total of over 2,000,000 prisoners of war, regular and guerrilla units of Allied armies, plus sundry civilians working with the Army over-seas—in addition to providing direct relief in liberated areas-are already out of date.

A better estimate might be that the Army is now feeding, or soon will be feeding, as many as twice this number.

There is no prospect that victory over Germany will ease the food situation soon. Actually victory will bring a sharp spurt in relief requirements (though liberation of most of Europe in time for spring planting would help later this year). The army of occupation must still eat, and military requirements in the Pacific are on the increase.

· Looking Back-In large measure, the present squeeze in food is the inevitable-and unavoidable-result of steel ily mounting demands which have no outrun increases in production. Car ians would be eating better today Washington had worried more about shortages and less about surpluses a la months ago, and if relief requirement had been anticipated through in cious stockpiling.

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Second-guessers are now regretting edible lard that went into soap kette last summer, sows which went to me ket in the glut of 1943 and '44 (who it seemed more important to conser feed than to make meat), recent n tion holidays on canned goods at meat, and lax distribution and ration ing of sugar and other foods.

 Agencies Blame One Another—WFA which cried "wolf" most loudly about surpluses and tailored crop goals to conform to its fears, has received the major share of the blame. Its official shift some to the Army, which was confident that the European war would be won in 1944 (the Army counter that it never pretended that V-E Da would ease food supplies). Stingy OP price policies are blamed for the light weights of cattle and for the Army inability to fill its meat and poulty requirements without constantly in creasing the percentages of total production that must be set-aside for the government. WFA's reluctance to a cede to tighter controls is blamed by OPA and the Army for current maldistribution of scarce civilian foods.

Much of the responsibility must be lodged higher up with the White House and the Office of War Mobilization Director James F. Byrnes. If election politics did not dictate last September's ration holiday, they certainly did not restrain it. Roosevelt made relief commitments at Yalta which the country is ill-prepared to meet.

So far as shortages of canned goods, butter, fats, and sugar are concerned, there's not much the U. S. can do but ride them out. Shortages of fats and oils and sugar are world shortages. Butter supplies can be increased only at the expense of other dairy products. · Won't Cut Army Rations-Washington is tackling the meat shortage with a patchwork of remedies, with everyone giving a little ground. The Army is not cutting the basic soldier's ration (a pound of meat per day)though this has been discussed. Others who eat at the Army's table will not be fed so well in future.

A boost of 11¢ a lb. in poultry prices may mean more chickens and eggs a few months from now. Congress seems disposed to give OPA more money to enforce meat prices and rations. Tighter distribution controls are taking the form of direct allocations

neat supplies (Byrnes has invested with this power) and measures ivert slaughter from the farm and ederally inspected packing houses the federally inspected packers V-May3'45,p20) who must supply the military and the civilians in cities far from centers of produc-

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iowernment Takes 31%—Estimated ian second-quarter meat supply at annual per capita rate of 115 lb. inst 126 lb. prewar) is just a statisfarm families and those who live mall towns and cities supplied by Islaughter probably are getting 160 (70 lb. Civilians in big cities are ing 70 lb. to 90 lb.

r-WFA covernment requirements (mostly ly about tary) are now taking 31% of the goals be ntry's meat. In 1944 they took ived the 5% of a much larger supply.

st of 50¢ a cwt. in the cattle sidy (BW-Jan.13'45,p18) may bring a more cattle to market and enage feeding to heavier weights. Cattle marketings already are at ord levels, and weights are running yslightly behind last year's. Subsidy ney may also be found to sweeten hog shortage for packers.

But, despite packers' charges that A pricing policies are responsible the meat shortage, Washington is really agreed that higher prices will little to put more meat on the table. In 1944 fall hog crop, which will be received this spring and summer, is below the '43 crop. With marings of range-fed cattle, and this ring's pig crop, meat supplies will be seasonally and there's nothing ashington can do to hurry nature.

AY TAX WAR ALCOHOL

Shortly after Pearl Harbor appellate arts in Kentucky held that the state ald not collect its 5¢-a-gal. production on alcohol manufactured for war at Later this exemption was ratified the state legislature. Now Gov. meon Willis, hard pressed for old age asson and other public assistance ads, wants to reinstate the levy.

Willis contends that the government ow contracts for alcohol on a costus basis, and that Supreme Court rulgs have set a precedent for collecting milar taxes. He cites the court's upolding of Alabama's right to impose a les tax on lumber used in an Army
mp by a cost-plus builder. The govmor is expected to ask the legislature take action shortly.

The production tax ran as high as 1,006,987 for the 1941-42 fiscal year hen distillers were turning out bever-

e alcohol.

Time for Pullman

Federal court refuses to stipulate drastic penalty asked by U. S. if company fails to sell car-operating firm within year.

Last May, Pullman, Inc., was ordered by a federal court to divorce its sleeping car service from its car manufacturing operations (BW-Jul.29'44,p49). Although the company finally decided to comply with the order without appealing to a higher court (BW-Sep.16' '44,p32), one big question remained: How?

• Court Withholds Teeth-Last week's order entered by the three-judge U. S. District Court at Philadelphia did not seem to supply the complete answer. Pullman, Inc. (the parent company of car-operating Pullman Co. and of equipment-building Pullman-Standard Car Mfg. Co.), at that time received the court's directions about its plan for dissolution by selling the Pullman Co.'s stock or physical assets.

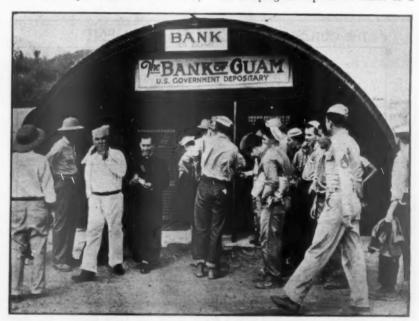
Principal fireworks came when Dept. of Justice antitrust lawyers, at a preliminary hearing, asked the court to approve Pullman's plan. But they urged the court to put teeth in its order by stipulating that unless the company completes the sale of all shares of all physical assets within one year, the court would force Pullman to sell Pullman-Standard instead of the car-operating subsidiary. This would be a drastic penalty, since Pullman-Standard is the big profit-maker of the two, and should therefore be easier to sell than the sleeper operation.

The court turned down this government request, on the ground that this would leave Pullman, Inc., in an extremely disadvantageous position to bargain with the railroads. Further, no penalty was set for failure to sell within the year. However, the court retains jurisdiction and the right to change its

decree at any time.

• Railroads Mark Time—In neutral circles, this was received as a substantial victory for Pullman. The Army, Navy, and Office of Defense Transportation have said that they do not want anything to happen to upset the present method of operating sleeping cars during the war emergency. It is considered highly improbable that the court would fly in the face of these three federal agencies, no matter how severely the Dept. of Justice might be irked by greater forbearance.

Because of this known circumstance, the railroads—the logical purchasers of the sleeping car operation either as a



NOTHING TO DO BUT SAVE IT

Back in business in a Quonset hut, the reopened Bank of Guam gets a concerted rush from both servicemen and civilians. And because there's little to buy on the recaptured island, wages not being deposited into check and savings accounts are going into war bonds and drafts for the folk back home. Like another in Samoa, the bank is owned and operated by the U.S. Navy.

corporation or as an aggregation of physical assets-have been waiting out the war. Their feeling seems to be that they can do nothing significant until after the war.

· Carriers Prepare Report-Three regional committees were set up last year by the Assn. of American Railroads to study the sleeping car situation and make recommendations. The committees have studied exhaustively, but as yet no reports have been released. Industry experts think that these groups may get busy, now that the court has ruled on Pullman's plan.

Some railroad men long have wanted to operate their own sleepers, but best guess in transportation circles is that this desire is cooling. Standard operating contracts with the Pullman Co. permit the railroad to buy as many cars as operate on its lines. Hence it would be simple for any road to give notice of termination of its contract and exercise its option to buy the cars regularly used

in its trains.

Pennsylvania Railroad an-The nounced some months ago that it wanted to buy its cars under this clause, and Pullman accordingly reported this fact to the court last fall.

But within the fortnight there has been much off-the-record talk that roads which operated their own sleeper service in past years now want no more of it.

FPC Loses Round

Supreme Court ruling in Connecticut electric utility case lends support to states' rights advocates, rebukes commission.

States' rights advocates crept out of their foxholes this week when the Supreme Court held that ownership of electric power facilities that are used solely for local distribution does not subject such operators to jurisdiction of the Federal Power Commission even though the lines may carry energy which has been transmitted in interstate commerce.

• Even the Light Cord-The court declared that by FPC's standards, "the cord from a light plug to a toaster is a facility for transmission of interstate energy if any part of the load is generated without the state."

Such a construction of the law, Justice Robert Jackson's majority opinion states, might be "quite unobjectionable and perhaps highly salutary" if no state governments existed and "the only conflicting interests to be considered were those of the regulated company." But Congress, Justice Jackson observed, "sometimes is moved to respect states

rights and local institutions even some degree of efficiency of a le plan is thereby sacrificed

• Goes Back to FPC-The Sa Court's ruling came in a 6-3 or reversing a circuit court decision upheld the power commission's o tion that the Connecticut Lie Power Co. is a "public utility" the terms of the federal power act case was remanded to FPC for ings which are consistent with court's opinion.

The case was argued on the tion whether C.L.&P. ownership substation at Bristol, Conn., the which passed (for local distrib alone) energy generated in Massa setts, rendered the company su to the federal power act. The com had cut numerous other intercon tions to render its business purely

trastate.

• Price Angle-The Supreme Co pointed out that the price of the Masachusetts energy in Connecticut on be regulated by FPC before the ene ever reached C.L.&P., thus end fulfillment of the purposes of the eral power act.

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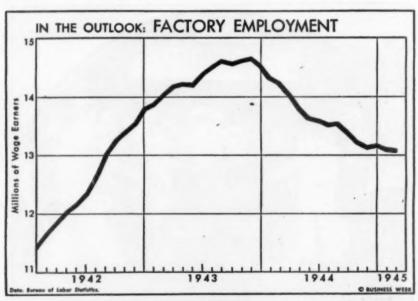
Badly needed increase production will be provided new facilities and extra gas boost present output.

A government interagency carb black committee, which War Mobilition Director James F. Byrnes set when rubber production slumped lack of components, announced week that new facilities for 198,100,0 lb. a year have been approved. (rent production is about 80,000,000 month (BW-Mar.24'45,p21).

· More Propane Gas-While the ne \$11,701,970 facilities are being buil other steps for immediate expansion of carbon black production have been

The Petroleum Administration War will make available additional pane gas and the Texas Railroad Co mission will help secure extra gas use in the Texas plants. The net i sult will be an increase of 2,500,00 lb. in the monthly production rate of carbon black.

Meanwhile, exports will be checked with the expectation that 5,000,000 lb can be lopped off and kept here. Within two months, when the heating seaso definitely ends, new facilities can utilis naphtha and gasoline which PAW of make available and which will increase



Factory employment has held almost stable in the past three months, the pace of the current munitions drive being reflected in a slight rise in arms-plant jobs, while clothing and food industry work forces were declining. Nonetheless, the downtrend that started in November, 1943, and has already seen the dropping of 1,600,000 wage earners from factory payrolls, has never yet been really reversed, and will resume a faster rate when Germany falls. Part of the drop is due to improving arms efficiency-though less than was thought before (page 9)-and part is due to the draft and other drains on manpower.



AMERICAN TROOPS HELP HOUSE BRITONS

While bombed-out Londoners await lend-lease shipments of prefabricated houses from the U.S. (BW-Mar.24'45,p48), they're moving into neat comrounds of Quonset huts built by American soldiers. These crude four-room dwellings of brick and sheet metal, now unneeded by the Army in England, will shelter families that have been living in the subways. To the task of erecting the huts and a British type of prefab, Gen. Eisenhower has assigned more than 3,000 U. S. engineering troops to help 140,000 native workers. Their goal: to replace some 55,000 destroyed homes in the London area.

carbon black production by 1,500,000 b. more a month.

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• To Rush Program-The new facilities, given AA-1 priority, are all scheduled to be completed this year. They are: Nam Facilities

TACM	Facilities
Cabot Carbon Co.	
McCoy, La	\$1,040,000
Borger, Tex	801,660
Guyman, Okla	262,000
Wickett, Tex	
Charles Eneu Johns Eunice, N. M	on 2,825,000
United Carbon Co. Ryus, Kan	1,105,748
Continental Carbon Sunray, Tex	Co. 330,000
J. M. Huber, Inc. Boyer, Tex	212,400

J. M. Huber, Inc. Boyer, Tex.	212,400
Additional or Supplementary Faci	lities
United Carbon Co. Ryus, Kan. Odessa, Tex. Ector County, Tex. Ector County, Tex. Foster Field, Tex. Midland, Tex. Midland, Tex. Phillips Petroleum Co. Borger, Tex. Eunice, N. M. Goldsmith, Tex. Cities Service Oil Co.	158,621 139,475 139,000 28,755 379,810 142,826 53,000
Ector County, Tex. North Cowden, Tex.	224,000 150,000
Charles Eneu Johnson Monument, N. M. Jefferson Lake Sulphur Co.	410,000
Clemens, Tex. Roxboro Steel Co. Hardin, Tex.	360,454 350,000
Columbian Carbon Co. Seagraves, Tex.	

BUSINESS WEEK . Mar. 31, 1945

Ward Duns U.S.

Mail-order company warns Army of liability for federal and state taxes. Management answers criticism of policy.

A month in advance of the annual stockholders' meeting, at which its management policies-particularly with respect to labor-are certain to be under fire, Montgomery Ward & Co. on Mar. 21 made public a letter written by Harold Pearson, its vice-president and treasurer, to Maj. Gen. Joseph Byron, who runs those Ward properties that were seized by the Army two months ago (BW-Jan.6'45,p16).

• The Old Refrain-The burden of the letter was the familiar complaint, "You owe us money; please pay." But it was no simple dun that Ward presented the Army; it involved complicated questions

of tax accounting.

The problem arises because Ward has to pay federal excise taxes and state sales and used taxes on the merchandise it sells, and those taxes are included in the selling price. On the goods sold through

those properties controlled by the Army, the tax money has been piling up in the Army's bank account, but Ward is held liable for its payment.

All told, in January and February, Ward says that it incurred a liability of \$346,432.94, which the Army is now obligated to pay. Of this sum, federal excise taxes account for \$127,311.69 and state taxes \$219,117.25.

• Deadline Is Ignored-Pearson complained that the Army had ignored an earlier letter of Feb. 7, raising the tax issue, and he threatened to "cease payments" on such sales unless the Army ponied up and further agreed by Friday, Mar. 23, to meet future payments.

The Mar. 23 deadline came and went without any settlement of the issuenot because the Army refused to recognize its obligation to pay the taxes but because it insisted on having a detailed breakdown of the bill properly approved by its accountants.

• General Is Angered-How soon company and Army accountants could effect the necessary meeting of minds remained a question this week, for Gen. Byron was obviously annoyed at the policy of passive resistance which the Ward management has followed since the Army moved in.

Specifically, he was annoyed because Pearson's letter, given to the press, implied that the Army was derelict in the tax matter, whereas, in response to the Feb. 7 letter, the Army had informed the company that it would be reimbursed or credited for taxes paid as soon as it furnished a list of the taxes collected by each of the Armyoperated facilities.

Ward's first attempt at satisfying that request accompanied Pearson's ultimatum letter of Mar. 21. Byron also indicated that the Army would pay

the taxes direct, if Ward preferred.

• Four-Page Defense-The tax ruckus, as well as whatever else may happen in the Ward situation between now and Apr. 27, must be weighed in terms of its effect on the annual shareholders' meeting which will be held on that date. Two stockholders, Frank McCulloch and Zara duPont, have submitted resolutions censuring Ward's board chairman, Sewell Avery, and calling for an end to the company's defiance of the National War Labor Board.

The Avery management gives almost half of its four-page proxy statement to defending itself against the charges. The statement says that McCulloch, who owns 100 shares of common, was defeated for a public office in 1938 when he ran with the support of A.F.L. and C.I.O. and it charges that both he and Miss duPont, owner of 23 shares, in 1944 were members of the Political

Sound Business

Makers of wire recorders will discuss standardization as essential preliminary to bid for competitive postwar market.

On Apr. 5, the 15 manufacturers of equipment for recording and reproducing sound on wire by magnetism will meet to discuss standardization. All of them are licensed by the Armour Research Foundation of the Illinois Institute of Technology, which developed and patented the art about the time the U. S. entered the war. Their meeting place will be Stromberg-Carlson head-quarters in Rochester, N. Y.

• Why It's Important—Wire recorders are expected by their proponents to compete directly with office dictating machines and home phonographs of the cylinder, disk, and film types, and only a little less directly with radio and television. That is why standardization is vitally important, if a recording made on one manufacturer's product is to be

reproduced on another's.

Not officially on the agenda, but certain to grip the interest of licensees quite as strongly as standardization, is a discussion of all-over market potentialities. Thus far their entire output has been taken by the armed forces.

Several advantages are claimed for wire recording. Its developers say that it requires a minimum of equipment, skill, and care. Immediate playback is possible. A recording is said to retain original clarity indefinitely. Wire can pick up tones at sound levels ranging from 15 to 40 decibels—including whispers and musical notes scarcely audible to the human ear.

• Errors Wiped Clean—Of prime importance to office dictation is the fact that slips of the tongue and other mistakes can be easily removed from a wire as originally recorded, and without affecting the rest of the recording. The errors are wiped clean by running the offending portion of the wire quickly through a demagnetizing unit. Not only can correct dictation be reinserted immediately, but any wire can be demagnetized as a whole and recorded over and over again.

The Army and Navy restrict details of how they use wire recorders, reveal-

ing only that their compact instrument (which need weigh only 3 lb. with all essential equipment) take dictation for instructions to personnel, and make permanent records of orders given our ship communications systems, class in structions, and battle noises. A complete record of the battle of Saipan wa made on wire for immediate military analysis and eventual release to civilians • Continuing Research—The Armon Foundation is plowing \$90,000 a year into further wire-recorder research sharing its findings with all 15 licensess They in turn show signs of willingness to pool some of their own research find. ings as a help to getting their business off to a good postwar start.

Recent research developments have already made obsolete the standard used for the only model so far manufactured in volume. This unit, Model 50, is about the size and shape of a case for a small portable typewriter. It uses two spools, 3½-in. in diameter and 1½-in. high, each capable of holding 11,500 ft. of 0.004-in. carbon steel wire with a capacity of 66 min. of dictation or other recording. The wire simply threads through a magnetic recording head from a full spool to an empty. The playback apparatus includes one pickup vacuum tube and one amplify-

• New Wire Developed—Most recent development of the foundation is a 0.003-in, stainless steel wire whose smaller diameter permits more length on a pair of spools, hence a recording capacity of 135 min., or double that of the original carbon steel wire. What's more, the stainless appears to provide recordings of higher fidelity.

It is anticipated that standardization to be discussed at next week's Rochester meeting will include as a minimum: (1) speed at which the wire travels through the magnetic head, to insure that all recordings will play back in correct pitch on any machine; (2) size and design of the wire spools, or magazines, to render them interchangeable among all makes of machines; (3) diameter of the wire itself.

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• For the Traveling Man—Presumably a manufacturer of wire recorders could go ahead on his own standards to build a dictating machine for use in a single office, but he would run the risk of building himself out of a lush market that is expected to be furnished by traveling salesmen and executives. Idea is that each one of them, and they run into many thousands, will forego the daily hand-written report for a dictated report, to be mailed to the home office for playback or transcription, when portable recorders become available in every hotel at nominal rentals.

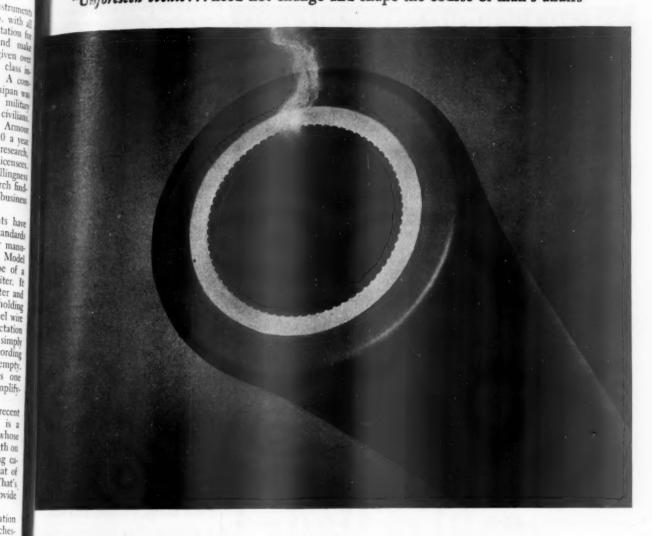
Although a manufacturer could con-



DESERT BOOM TOWN STILL GROWING

Erection of barracks in the Mojave Desert is eliminating trailer homes (above) in one of the war's last big boom towns, Inyokern, Calif. It's the site of the Navy's vital \$35,000,000 rocket-testing station (BW—Feb.10'45,p16), and the scope of its expansion indicates it won't be among the first mushrooming war centers to fold up. From a normal population of only 132 early last year, Inyokern has grown to number uncounted thousands of technicians—excluding 3,000 construction workers. Besides the shops, barracks, mess halls, stores, and a theater now being built, the Navy plans to build a hospital, postoffice, a bank, and schools. Meanwhile the nearest recreation is at Bakersfield, 70 miles west.

"Unforeseen events . . . need not change and shape the course of man's affairs"



THE ECHO IS HEARD FOR YEARS

AFTER THE LAST SHOT has been fired in World War II, the echo will roll down through the years. For war, with its dislocations and disruptions of normal life, leaves an imprint upon men.

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The record of past postwar years tells us that one effect of the sudden shifts from peace to war and from war to peace is a marked increase in crime—including dishonesty of employees

in every field of business.

This is a threat to American business which can be met with a program for postwar security against employee dishonesty—a program available right now to employers, large and small.

Under it, your business is protected

PROGRAM FOR
POSTWAR SECURITY
ogainst Employee Dishonesty

immediately against losses due to the dishonesty of any of your employees, new or old, regardless of the job they hold.

This worthwhile plan can be put into operation quickly and economically. Ask one of the 10,000 Maryland agents or your own broker about it. Maryland Casualty Company, Baltimore 3, Md.

THE MARYLAND

INSURANCE OFFERS A SPLENDID CAREER FOR THE RETURNING WAR VETERAN WHO WISHES TO START HIS OWN BUSINESS.

IF YOU ARE INTERESTED, WRITE TO OUR HOME OFFICE



...and what are they PREPARED to do?

The factories of the Otis Elevator Company have been devoted one hundred per cent to the war effort. That's not unique. That's the pattern of American industry.

however ...

In addition to our large scale production of a great variety of highly precise mechanisms of war for the Army, Navy, and the Air Corps, we have continued to produce elevators. We have manufactured freight as well as passenger elevators for hospitals, ordnance depots, naval warehouses, and other priority installations.

this means ...

Although our facilities, organiza-

tion, and resources have enlisted for the duration and have gone all out for war production as a matter of actual fact we have never been out of the business of manufacturing, installing, and servicing elevators.

and so ...

As our war work is reduced or terminated, this company is prepared — with no change in pace, and without missing a stride — to resume furnishing the highest quality elevators and escalators for all peacetime purposes.



ceivably be brash enough to think in his particular dictating machine was eventually become the accepted machine will certainly await the development and adoption of standards before in ing into the even more inviting man of home entertainment. Speeds, speed and wire sizes will have to be standarded before any library of music, drawand other entertainment can be be up.

Meanwhile the foundation, which made elaborate plans and artists a derings of home sets with and withor radio and television, is marking to along with its unstandardized license

RADAR FOR AVIATION

Ten carloads of radar equipmen made available by the Army and Nan will enable the Civil Aeronautics Administration to undertake a long-che ished project—the application of radar civil aviation.

Main objective of the experiment work is the development of two devices a screen that will enable an airport of trol tower operator to visualize the positions of all aircraft within 25 miles, as a collision warning indicator for institution on airplane instrument panels to give a constant visual signal of the proximity of other aircraft within a limited radius.

CAA technicians say that the material received from the military will permit thorough experiments. Until the Army and Navy decree otherwise, however, secrecy will blanket the work done in CAA's laboratory.

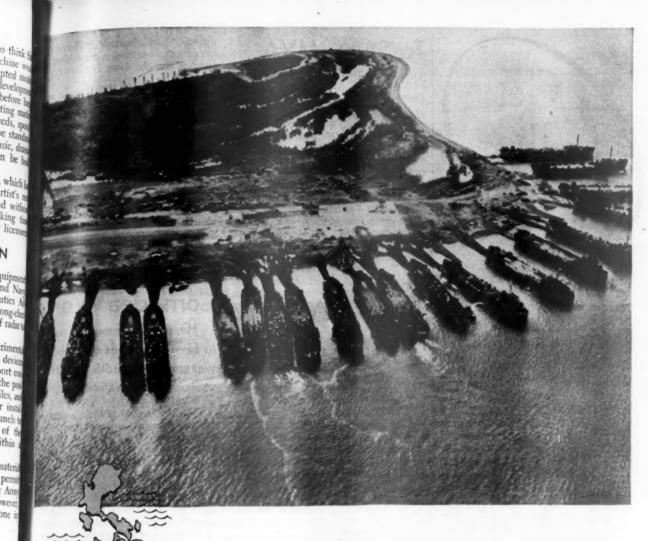
PUD CURB TO BE TESTED

A bill passed by the Oregon Legislature curbing expansion of people's utility districts (BW-Feb.3'45,p28) is in for a court test. Ink hardly was dry on the governor's signature when spokemen for the Oregon Grange, which fought the measure, promised to seek relief in the state Supreme Court.

The controversial bill prohibits PUDs from serving areas outside their districts without a vote in the large field. Proponents presented the bill to prevent small PUDs from gaining control of hydroelectric power in large, heavily populated regions. Such an attempt at power control was made by the little Hood River County PUD early in 1944, but its voters vetoed the PUD's \$175,000,000 bond plan (BW—Dec.4'43,p105).

Main Grange attack in the legislature was against the home-rule clause providing that no municipality may be drawn into an expanding PUD unless a majority of residents of the municipality

also vote to be included.



"...I shall return."

THAT PROMISE has been kept. Close on the heels of our first landings at Leyte came the gigantic Luzon invasion. On that first day, 80,000 tons of supplies and equipment were put ashore.

Matériel made in U. S. A. is the answer to ultimate victory. American Industry backs our armed forces on fighting fronts throughout the world.

One basic essential insures the success of our staggering war production — quality lubrication.

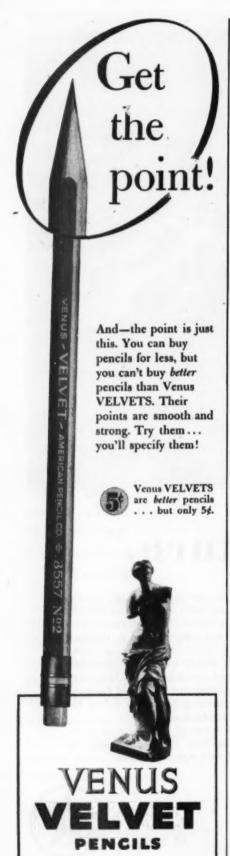
Texaco, in turn, helps to insure this

success by serving industrial plants under one Sales Agreement for all plants in the U. S.: 1. Greater convenience and utmost speed in delivery (through Texaco's more than 2300 wholesale supply points). 2. Uniform quality and specifications of industrial fuels and lubricants. 3. Skilled Lubrication Engineering Service to aid in increasing production.

This economical, efficient plan operates nation-wide for all industry, to maintain vital war production.

The Texas Company





To Study MVA

Missouri River proposal goes to three committees when Murray seeks to move it from commerce group bottleneck.

Pay your money and take your choice as to whether the prospects for establishment of a Missouri Valley Authority (BW-Dec.9'44,p20) were helped or hindered by the Senate's recent action in referring the plan to three separate committees.

• Murray Is Angered—The bill, pre-sented by Sen. James E. Murray of Montana, originally was referred to the Commerce Committee, drawing from Murray an angry demand that it go to the Agriculture Committee, which considered TVA legislation twelve years ago. Murray, an ardent New Dealer and public power man (BW-Feb.10'45, p22), feared that Sen. Josiah Bailey of North Carolina, less of an exponent of public ownership, would forever bottle up the bill in his Commerce Committee.

Bailey averted a showdown fight over a change of reference by suggesting that the Commerce, Irrigation & Reclamation, and Agriculture committees each be given 60 days, consecutively, to study pertinent phases of the bill.

Murray agreed, claiming that even with six months' delay in committee, his bill would be "expedited" in contrast to its chances before the Commerce Committee alone.

• F.D.R. Asks for Fund-President Roosevelt, meanwhile, has asked Congress to give the Interior Dept. \$4,400,-000 with which to draw up plans for development of the Missouri River, emphasizing that the plans would be required by and adaptable to Missouri à velopment, whether it were done b Interior and the Army Engineers or h an MVA.

Murray's bill is essentially the same as the one he introduced last summe except that it includes provision for "family-type farming" by restricting the sale of federal irrigation water to hold ings of not more than 160 acres of in gable land. It is this restriction that at the root of a bitter controversy California's central valley (BW-Dec.) '44,p34).

• Advisory Plan-The new MVA bill also creates a 17-member advisory com mittee, whose principal function, appar ently, would be to chart for MVA a course acceptable both in Washington and in home states.

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Corn Idea Works

Hemp-drying mills converted to save thousands of bushels of wet corn. Minnesota farm group sponsors cooperative plan.

That bright idea of Iowa agricultural officials to use idle government hempdrying plants in an effort to save wet corn rotting on the ground (BW-Feb. 17'45,p34) has been put to use in Minnesota.

of storage space (BW-Mar.24'45,p52).

Two plants already are in operation, and six others will be ready in April. Combined capacity, with two drying tunnels in each plant, will be from 50,-

• Two Plants Are Operating-Farmers Union Grain Terminal Assn. is converting eight Minnesota hemp mills into corn-drying plants to help retrieve some of the millions of bushels of wet com that has lain out all winter for lack



BUSINESS WEEK . Mar. 31, 1945

SUPERPOWERED PUMP

A tiny 10-lb. air compressor that builds up a 1,500-lb. pressure to operate bomb bay doors and the gun turrets on Superfortress bombers is displayed by its inventor, Richard T. Cornelius, secretary of the Cornelius Co., Minneapolis. Designed to work at almost any altitude or temperature, the little giant snaps open the doors in 7/10th of a second-reputedly 15 times faster than previous mechanisms. With seven of the compressors needed for each B-29, the machine is now in mass production by Cornelius and the Weatherhead Co., Cleveland. Custom tailor for a suit of armor

APPLYING braided armor or shielding to wire, tubing, conduit or hose, is a custom railoring job. Braiding can be applied directly to material to be covered, or the metal braid can be furnished in suitable lengths for the user to apply in his own plant during assembly operations.

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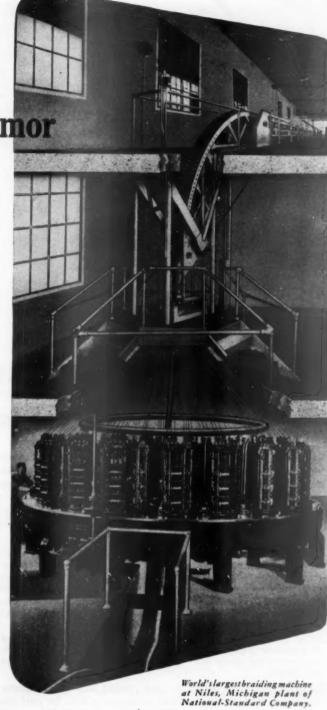
To provide the desired flexibility and other characteristics such as uniform coverage, resistance to mechanical abuse, resistance to elongation, or enlargement of diameter, braiding wire must be applied at precisely the correct angle and there must be no variation from this... from start to finish of the job.

That's why for fine radio wire 1/6" in diameter, or 16" steam expansion joints, more and more companies are calling upon National-Standard for their wire braiding work. For, we at National-Standard have the knowledge and experience necessary to give you a custom tailored job of braiding to meet exactly your particular requirements.

Today at National-Standard we have machinery available to braid steel, brass, copper, stainless steel, and monel metal. Let our 30 years of experience in the wire and wire fabricating industry help you with your braiding problem.

Buy and Keep War Bonds and Stamps





Divisions of National-Standard Company

NATIONAL-STANDARD CO.

Niles, Micb.

TIRE WIRE, FABRICATED

BRAIDS AND TAPE

THE ATHENIA STEEL CO.

Clifton, N. J.

COLD ROLLED, HIGH-CARBON

SPRING STEEL

1:0:

WORCESTER WIRE WORKS
Worcester, Mass.

ROUND STEEL WIRE, SMALL SIZES

0

WAGNER LITHO MACHINERY CO.

Hoboken, N. J.

LITHOGRAPHING AND SPECIAL

MACHINERY



THERE'LL be little excuse (or sale) for tough, tiresome, dangerous and slow actuating devices on products after the war. The demand will be for the kind of actuating power and convenience Blackhawk Hydraulic Controls supply. That's why 90% of all snowplow manufacturers now use Blackhawk — why Blackhawk is the leading producer of Hydraulic Controls used on every conceivable type of product—from coal cutters to embalming tables—why you should know all about Blackhawk advantages.

SIMPLE and EASY to INSTALL or apply a Blackhawk Hydraulic System as part of your product. No trick valves, ballasts or other sensitive devices! The range of pumps and rams is wide and versatile. Frequently a combination of stock units fits the need, or "standards" can be tailored for your postwar requirements.

LOWER COST — Blackhawk's specialization in and tremendous production of Hydraulics, together with unmatched engineering skill, assures the most economical and serviceable installation.

MORE EFFICIENT — No other actuating method can approach the efficiency of Blackhawk "high-pressure" Hydraulic Controls. They pack more power and performance per square inch—give finger-tip control—provide more speed and accuracy.

A Blackhawk Hydraulic System on your product immediately creates new sales points. Let us send you our standard catalogs as a basis for your consideration. We will counsel in confidence. Write Blackhawk Mfg. Company, 5300 West Rogers Street, Milwaukee 1, Wisconsin.

BLACKHAWK

High-Pressure Hydraulics

000 bu. to 100,000 bu. daily depends on moisture content of the com.

Corn entering the drying tune with moisture content as high as 40% discharged after a 45-min. treatme with moisture of 15% to 18% is moisture content under 20% is considered safe for storage).

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• While They Wait—Farmers show their unhusked corn directly from trud to conveyors which run through the tunnels, wheel their trucks to the opposite end of the plant, and receive from mechanical loaders their own dried comechanical loaders their own dried comechanical to deep their own dried comechanical to deep the cobe and the cobe of the

Each farmer is charged estimated operating cost of the plant for the time his corn is under treatment, with an excess collections to be refunded on a prorata basis when the plant closes.

• Usable for Feed—Marketing of corn after drying remains the problem of the owner. Farmers Union officials doubt that much of the treated corn will be salable, except for livestock feed.

The critical condition of con throughout the Midwest results from unfavorable curing conditions last fall shortage of boxcars to move the crop to market, and inadequate storage facilities on farms as well as in the rural elevators.

NEW MOVE IN OMAHA

Progress toward solving the Omaha power controversy (BW-Jan.20'45, p46) appeared to have been made last week when an entirely new Peoples Power Commission took office. The new commission is expected to negotiate immediately for purchase of Nebraska Power Co.

Mayor Dan Butler appointed six prominent Omaha businessmen to succeed former members of the commission who resigned. Among the commissioners who stepped aside were five who helped to form the Omaha Electric Committee, Inc., which recently bought Nebraska Power with the intention of turning it over to some Nebraska agency for public operation.

However, this move did not end the long quarrel over the utility. Butler objected to the price and assailed the commissioners for negotiating as individuals while they were under court injunction preventing them from acting as a commission. Later the Nebraska courts lifted the injunction. The members then quit to let Butler name a new commission to dicker for the plant.

Butler still objects to the price which Omaha Electric paid for the utility, and ultimate condemnation of the property would not surprise Omahans.

Tax Battle Ends

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Pennsylvania law affecting out-of-state corporations upheld by Supreme Court. Charges of discrimination are rejected.

The United States Supreme Court has upheld Pennsylvania's franchise tax on out-of-state corporations, in a decision which ended protracted litigation involving approximately \$66,000,000 paid into the state's treasury in the past ten years.

• Tax Liability Boosted—Had the court ruled otherwise, the commonwealth would have had to refund more than \$50,000,000 to more than 100 companies which operate in Pennsylvania, but are incorporated in other states, principally Delaware and New Jersey.

The law under attack was adopted by the Pennsylvania Legislature in 1935, during the administration of Gov. George H. Earle. It imposes a five mills tax on the Pennsylvania assets, payrolls, and gross receipts of the "foreign" corporations. The statute removed these companies from liability under the capital stock tax law which now applies exclusively to domestic companies, but the effect was to increase taxes on out-of-state firms doing business in the commonwealth.

Under the former law, the foreign companies were liable for less than one-

sixth of the tax they now pay.

• Discrimination Charged—Ford Motor
Co, and the Quaker Oats Co. carried
the appeal to the U. S. Supreme Court
after the Pennsylvania Supreme Court
upheld constitutionality of the tax.
Their chief argument was that the law
denied out-of-state corporations equal
protection of the laws, deprived them of
property without due process, and conflicted with the interstate commerce
clause of the federal Constitution.

The commonwealth argued that if Ford Motor were incorporated under Pennsylvania laws, its state tax would have amounted to more than ten times the assessments made under the franchise tax law. The court was told that the tax was not enacted for the purpose of discriminating against foreign corporations but to remove discrimination against domestic corporations.

• Big Companies Affected—Besides Ford and Quaker Oats, companies affected by the ruling include United States Steel Corp., Carnegie-Illinois Steel Corp., National Tube Co., National Steel Co., Koppers Co., Curtiss-Wright Corp., Republic Steel Corp., Allis-Chalmers Co., and American Cyanamid Co.

Clamina
DOES THESE THINGS FOR GLASS

- 1 Alumina makes glass more resistant to thermal shocks;
- 2 · It increases mechanical strength, both crushing and tensile;
- 3 · Gives glass greater brilliance and luster;
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- 5 Makes a more elastic and ductile glass;
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Alumina imparts many valuable properties to all types of glass, vitreous enamel, ceramics and refractories. Sample quantities of Alorco Alumina for experimental purposes are available to you. Write—ALUMINUM COMPANY OF AMERICA (Sales Agent for ALUMINUM ORE COMPANY) 1935 Gulf Building, Pittsburgh 19, Pennsylvania.

ALUMINUM ORE COMPANY



Aluminas and Fluorides

Sharp as a Tack?

Sherman H. Bowles has his own management methods, which is why Atlas Tack's leaky roof is not causing much alarm.

A tack company, a leaky roof, and a descendant of Miles Standish sent mild titillations through Wall Street, Washington, and various sectors of the industrial community last week.

The roof was that of the Fairhaven (Mass.) plant of Atlas Tack Corp., a company which blazed in the headlines a decade ago when gyrations of its stock touched off the first big Securities & Exchange Commission investigation. According to Sherman Hoar Bowles, president of Atlas Tack since 1943, the roof "has so many leaks you can't count them all, and the floor is falling in all over the building.

• Really "Remarkable"—Bowles, who speaks in husky whispers, included these and other distressing details in his annual report. "The sides of two of the boilers are caving in," he said. "The machinery is mostly very old and something falls in pieces almost every day." Indeed, he emphasized, it is really "remarkable" that the company's workers turn out such fine products, considering what they have to work with.

Other facts reported were that average earnings per employee were 30% higher in 1944 than in 1943; that dividends declared in 1944 totaled \$1.60 a share against the previous year's \$1.15.

Besides being a descendant of Capt. Standish, Bowles is a cousin of OPA Administrator Chester Bowles. What brought Sherman Bowles and his dolorous report into the news last week was the yearly meeting of Atlas Tack stockholders, attended by a grand total of twelve persons including three reporters. • Stock Transfer Revealed-One stockholder wanted to know why it had not been reported that the company president's own holding company had been buying stock at the very time the plant's rundown condition was being publicized. Bowles promptly explained that his holding company, Valley Trust, Inc., had recently transferred its 49,393 shares "at cost" to the employee benefit funds of two Springfield (Mass.) newspapers; that control of Atlas Tack was therefore vested in the two funds.

Since Bowles runs the Springfield newspapers and administers the two benefit funds, the change did not bode any shakeup in the tack company. And to outsiders looking in, it was not too clear why Bowles had suggested, prior to the annual report, that stockholders exchange their certificates for bonds at \$20 a share.

• Holders Just Sit Tight-Either the holders were "cheerful optimists," as Bowles implied in his report, or they did not see the advantage of having a lien on a plant with a leaky roof. Anyway, they preferred to retain their stock—and maybe things weren't so bad after all, with earnings of \$1.72 a share.

Countering a charge that he was running down the company, Bowles said that internal revenue considerations had prompted the statements regarding the plant's condition. Bowles' contention is that insufficient depreciation was charged over a long period of years. The company's depreciation figure, \$62,-872.71 in 1943, was upped to \$99,-954.64 in 1944.

The stockholders' meeting ended after reelection of the board of directors, consisting of Bowles, three Bowles employees, and a former employee.

• More Than One Type—What seemed to be highlighted more than anything else by the proceedings was that there is more than one type of successful industrial manager. Those who know Bowles aren't worrying about that roof. They intimate that, while the man's business policies may sometimes run along orthodox channels, any connec-

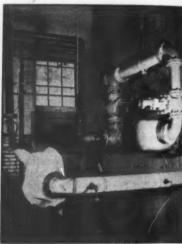
tion with orthodoxy is purely come dental.

Although Sherman Bowles fights in of Who's Who sketches, three immed ate progenitors—all named Samuel—a ceive respectful and lengthy attention at the Dictionary of American Biograph. The first of these Samuels (son of an other Samuel who was a Hartford baker migrated to Springfield, Mass., on a fit boat in 1824 and founded the Springfield Republican. Building of the Botton & Albany R. R. in 1839 boomed Springfield and the newspaper.

• Editor-Grandfather—The next Samuel Bowles (1826-1878) made the Republican a daily, made himself one of the nation's most famous editors, and left a permanent impress on American newspaper style. It was he who said, "Put it all in the first paragraph." His editorial fights included tussles with Tweed Gould, and the other Erie R. R. manipulators. He once referred to Lincoln as "a simple Susan" and described himself as having a "fine and vagrant head."

as having a "fine and vagrant head"
Printers of Springfield had a folk
rhyme which ran, "There's old Sam
Bowles, and young Sam Bowles, and
young Sam Bowles's son—." When
the young Sam of 1878 took over the
Springfield Republican, he continued
its independence in a career which in-





TURBINE EXPERIMENTS UNDER WRAPS

Secrecy and military security are doubly emphasized by no admittance signs (left) on one of private industry's newest laboratories for improving gas-turbine fuels. Reason for the precautions around this unimposing plant at Wood River, Ill., is its experimental turbine which is installed like so much plumbing but literally kept under wraps (right) to shield it from prying eyes. More impressive but less secret are the engine's towering 5,000-gal. fuel tanks and the huge 1,000-hp. compressor which supplies it with air. Here Shell Oil Co. is pushing research toward determining the best fuels and lubricants to withstand the turbine's terrific heat. Besides this project in its own realm of science, the petroleum company is working on new experimental apparatus that may affect development of the gas turbine for power on land, sea, and air.

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When

air photographs

help your business?

This is one of over 30,000 individual air photographs taken of Pennsylvania in the State air mapping service.



Between 1939 and June 1941, the Commonwealth of Pennsylvania completed the air-mapping of practically the entire State with aerial photographs and mosaics built up out of those photographs.

This was a peacetime project, but it immediately became a military asset of immeasurable value. It saved weeks or months of field work in locating defense plants, housing developments, pipelines, telephone and power lines, railroad extensions and other installations.

In the future, it may be just as valuable for you. If you are trying to determine the best location for a new plant, it can help you compare one site with another quickly and without field work, and it will give you many types of information about all the sites you are considering in Pennsylvania.

BUT it is only *one* of the many collections of facts which have been compiled for you by the State which probably knows more about itself than any other.

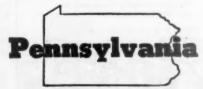
The Commonwealth of Pennsylvania compiled the first complete list of available plants. It carried on a 12-year study of water conditions all over the state. It has facts on raw materials, power costs, transportation facilities, available short-haul markets, labor supplies and dozens of other kinds of information to help you make an intelligent choice.

Write or wire the State Department of Commerce, Harrisburg, for information and personal help.

Write for this free book



DEPARTMENT OF COMMERCE, HARRISBURG, PA.



Edward Martin, Governor Floyd Chalfant, Secretary of Commerce

PENNSYLVANIA—
a fine place to live, a fine place to be in business



...Ends Needless Office "Marathons"

Qualified Graybar Specialists in 86 principal cities are prepared to show you how Teletalk Intercommunication can save your *irre*placeable time...and energy... by eliminating the countless, and often fruitless, little "marathons" between offices and departments.

Whether your business or plant is large or small, Teletalk, by giving instant voice-to-voice-contact between two (or several) key individuals, brings substantial timeand-effort savings that quickly more than offset the cost.

Your Graybar Specialist is a good man to know. He can appraise your specific needs and recommend the Teletalk installation best suited to them. Look up your nearest Graybar office in the classified telepane book—and call up today.

Graybar Electric Company, Inc. Graybar Building, New York City





BIG ENGINE FIGHTS FIRE WITH FOG

Ready for action at the Army's airbase on the new Greater Pittsburgh airport is the latest in high-pressure fire-fighting equipment. The 20-ton giant, built by American-La France-Foamite Corp., is mounted on a ten-wheel chassis and has a typical military-type body. Designed to battle plane-crash fires, the engine carries a 1,000-gal. water supply which it discharges as a flame-snuffing "fog" to help in rescue operations. An engine at the rear powers the pumps which are connected to two nozzles which hurl spray over a 125-ft. circle.

cluded opposition to annexation of the Philippines, opposition to Henry Cabot Lodge's "aristocratic demagogism," and exclusion of all liquor advertising from the paper in 1914.

• Father of Sherman—This Samuel Bowles, who died in 1915, was the father of Sherman H. Bowles.

A Harvard man, Sherman Bowles joined the Marine Corps in the World War, was awarded an R. H. Stearns Co. prize for being a perfect physical specimen at the time of his enlistment. He returned to the family newspapers, which came to embrace not only the Republican (morning) but three other papers, the News (evening), and the morning and evening Union. The four newspapers have their own variations in editorial policy and style, and employees fired from one paper are sometimes re-employed on another.

• A Fight With Advertisers—In the 1920's Bowles ruled that anybody advertising in one of his papers must advertise in all four. The merchants objected, got out their own handout paper, found it inadequate, and then capitulated to Bowles.

In 1935, when Bowles fired the local president of the Typographical Union for refusing to accept a foremanship, an unauthorized strike resulted. Bowles broke the strike, maintained "111 years of continuous publication."

Now in his middle fifties, Bowles is still a fine physical specimen, tall, slim, and energetic. He usually wears a well-tailored gray suit, has rimless glasses and graying sandy hair. Married,

he has children, and makes his home at Marshfield, Mass.

One of the Bowles economic tener is reported to be a conviction that the only people who really count in industry are those who make the goods and those who sell them. He tends to look suspiciously at individuals who sit be hind big desks. On the other hand, he has been known to pop into his new paper plant at odd hours of the night grab a broom, and help sweep up.

• Election of a Board—When Bowles acquired control of Atlas Tack in 1943, he picked four of his newspaper employees (including his secretary and a reporter) to become directors. He took them in a bus to Providence, where the bankers and other dignitaries who had controlled the company had assembled. He asked them please to be speedy in voting themselves out and the new board in, since the new directors had to "get back to work." The bus whisked the elected back to Springfield.

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Despite his aversion to publicity. Bowles periodically breaks into print. In the 1930's, he was fined for refusing to turn in his gold to the government. (He had a contract with a Scandanavian paper concern which required gold payments.) In 1938 he was fined \$500 in federal court for contempt because he had ignored an injunction against use of his circulation trucks in interstate commerce. In 1942 he figured briefly in a vain attempt to keep the Philadelphia Evening Public Ledger alive.

• In and Out of the News-Atlas Tack, like Bowles, has been in and out of the

BUSINESS WEEK . Mar. 31, 1945



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If your working day is a series of miniature "marathons" . . . running between offices or departments just to talk to some individual who, too frequently, isn't there when you want him . . . by all means enjoy the advantages of a Teletalk Intercommunication System.

The simple, quick flip of a handy Teletalk keyright on your desk-puts you into voice-to-voice contact with any other key individual in your organization. Talk with several at once, if you wish . . . hold a conference at any moment!

Teletalk saves time and effort . . . ends waste motion, delay, confusion . . . speeds work in your office or plant. Literally, it adds hours to your work week.

Whether your organization is of giant size or a modest two-office suite, there is a Teletalk installation ideally fitted for your special needs. Teletalk is easily installed; it operates from your light circuit. Look in

your classified telephone book for the name of the nearest Teletalk distributor; let him plan with you and recommend the best and most economical installation. If he isn'tlisted in the book, write us.

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LET'S ALL BACK THE ATTACK BUY EXTRA WAR BONDS

VEBSTER



Racine, Wisconsin, U.S.A. . Established 1909 . Export Dept.: 13 E. 40th Street, New York (16), N. Y. Cable Address "ARLAB" New York City

"Where Quality is a Responsibility and Fair Dealing an Obligation"



HILDHOOD'S FIRES are make-believe, But how urgent is the need to protect one's home from tragic

loss by the real thing. Today the increasing frequency of dwelling fires makes it imperative to take extra precautions and to secure the very best in insurance protection.

Hardware Mutuals policy back of the policy assures complete protection through standard policies, expert service of representatives within easy telephone reach, prompt sympathetic settlement of claims, without red tape. It also means extreme

care in risk selection - which has resulted in return of over \$93,000,000 in dividend savings to policyholders. Dividend savings may enable you to buy

The Policy Back of the Policy

Owr way of doing business that makes your interests our first consideration.

added protection or to reduce the cost of your present coverage.

In other types of insurance as well-automobile, burglary, plate glass, workmen's compensation, or general liability, the policy back of the policy stands for substantial savings and prompt, personalized service.

Send for our free "Household Inventory" booklet, and keep a record of everything you own. In case of fire, you will have an accurate list to give your insurance company.

FEDERATED HARDWARE MUTUALS slars Multiul Fire Insurance Company, Home Office, Steam Point, Witness and Hardware Insurance Company, Home Office, Occatoma, Missen HARDWARE MUTUAL CASUALTY COMPANY

LICENSED IN EVERY STATE

Stevens Point, Wis. * Owatonna, Minn. * Offices Coast to Coast Compensation, Automobile and other lines of non-assessable Casualty and Fire Insurance

news a good many times. The pany's stock became a market sense in 1933, when it shot from \$6 and in June to \$34 in December, when was suppressed. Philip H. Philbin a 35-year-old market operator Pueblo, Colo., had reputedly cleaned \$600,000 "by creating through sales' fictitious and inflated values."

Evidence obtained by New State was turned over to the fed authorities. Philbin, then repos hunting big game in India, was india with 14 others in 1935 on charges violating the then new "truth in sen ties act," using the mails to defra ties act," using the mails to defra and conspiring to defraud. He retund in 1937, said, "I'm not such a le fellow," pleaded guilty to a 16cm indictment, and received a prison a tence along with two of his associate · SEC Has a Workout-What had he pened in Atlas Tack stock became f subject of the first big investigation the Securities & Exchange Commiss

In view of the small number of At Tack shares outstanding (94,551, which Bowles now controls more th 51%), there has been talk of the visability of dropping the stock for the Big Board list. Bowles has indicate that it is a matter of indifference

• Craft Guild Heritage-The compa which produces many thousands of d ferent kinds and sizes of metal item including tacks, has a second plant; Henderson, Ky. One of the company unmeasurable assets is reported to the skills handed down in New England from father to son in a craft gui which is said to be a 17th century shoot of the old English guild of tad makers.

Other Bowles business interests at said to include a women's shop i Springfield and a beauty shop in North ampton, Mass., and he is currently n ported to be seeking an airline franchise

BLUEPRINT FOR SAN DIEGO

San Diego, Calif., now claims the honor of being the first war-boom of to make concrete plans for conversion to a stable peacetime economy. That city's chamber of commerce has just paid \$72,000 to Day & Zimmerman Inc., Philadelphia engineering firm, for an eleven-volume, 1,303-page report of the city.

A complete inventory of San Diego's assets and liabilities was made, an many specific measures recommended for expanding existing industries and attracting new ones. The survey in cluded all phases of the local economy in contrast to Robert Moses' \$100,00 survey of Portland, Ore. (BW-Not

MONROE Monroe Accounting Machine 209-485-191 CALCULATING LISTING ACCOUNTING MACHINES



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MODERN DESIGN

MONROE Listing and Accounting machines are worthy companions of Monroe Calculating machines, whose excellence of construction and dependability have made them standard equipment in offices throughout the world.

One outstanding characteristic of Monroe Accounting and Listing machines is their modern design. They combine time-tried engineering superiority with new structural and operating advantages. In their design, out-moded precedent was cast aside; streamlining to meet the demands of today was the objective. Hence these unique machines blaze new trails in making accounting procedures simpler, faster, more foolproof.

All of this has an important meaning to your business. Let a representative from our nearest branch explain why—and acquaint you with Monroe features . . . advantages . . . low cost of upkeep.

Every payroll department should have a copy of the Monroe Simplified Payroll Plan. Write to Monroe Calculating Machine Company, Inc., Orange, New Jersey.

Monroe owned Sales, Installation and Maintenance service in all principal cities.

OUT OUR WAY



SPEEDI-DRI is the modern, economical, efficient answer to oil-soaked, slippery floors. White, granular, and oil-thirsty, it is spread by hand and swept up with a stiff brush without shutting down a single machine. Its use eliminates expensive mechanical cleaning equipment, caustics, and dangerous solvents, and greatly reduces the man-hours needed for clean-ups. At the same time, it does a better job.

As soon as it's applied, it provides a non-skid surface. Workmen can move at top speed without fear of slipping. It absorbs oil and grease like a blotter takes ink, even pulling up old deposits in time. SPEEDI-DRI is non-combustible and fire retardant. Leading insurance companies recommend its use. There are 101 money-saving applications of SPEEDI-DRI. Write your name and address on the margin of this advertisement for complete facts — and FREE SAMPLE!

SUPPLIERS: East — Refiners Lubricating Co., New York 1, New York.

Midwest & South — Waverly Petroleum Products Co., Philadelphia 6, Pa.

West Coast — Waverly Petroleum Products Co., Russ Bldg., San Francisco 4, Calif.



20'43,p27), which dealt only with public works.

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The report points out that anticopated sharp cutbacks in aircraft production, San Diego's biggest war industry, emphasize the need for industrial diversification. To this end, 85 products not now made in San Diego were studied, and 42 were recommended as good postwar bets for the city.

Formation of a corporation by San Diego citizens to take over huge Defense Plant Corp. facilities (such as the plant now occupied by Consolidated Vultee Aircraft Corp.) and parcel them out to many small manufacturers is proposed. This type of plant use has already proved its worth in Manchester, N. H. (BW-Sep.2'39,p21), where shut-down textile mills of the Amoskeag Mfg. Co. were revamped and subdivided for 94 firms producing such diverse products as shoes, soup, electrical appliances, and rubber goods.

U. S. Builds Dutch Ships

Construction has started in the Albina Engine & Machine Works shipyard in Portland, Orc., on the first sizable foreign shipbuilding contract in the United States in 22 years.

The \$8,000,000 job calls for

The \$8,000,000 job calls for 20 shallow-draft cargo vessels for the Netherlands East Indies Co. for use in undeveloped harbors of South Pacific islands (BW-Jan.

13'45,p112).

Construction for the Dutch firm has U.S. Maritime Commission approval, it was revealed with laying of the first keel Mar. 16. G. H. van der Stoop, technical representative of the Netherlands purchasing commission, announced that the Dutch also have let a contract for one C-1 and ten C-3 merchant ships to the Sun Shipbuilding Co., Chester, Pa.

Smashed putch homeland yards and overworked British shipbuilding firms make it necessary to build the ships in the U.S. Portland industrial planners, faced with a surplus labor pool as war work slows in U.S. ship construction, welcomed the new foreign contract.

The new 180-foot vessels, designed by Albina engineers, will be used in war transport work until the war is over. Their reinforced bottoms for travel over reefs have a draft of only 8 ft. The ships can carry 460 tons of cargo.

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First comprehensive report the Metals Reserve Co. disoses its expansion into a twoillion-dollar operation.

Launched in mid-1940 to stockpile o materials—tin and manganese—the tetals Reserve Co. has expanded until is a two-billion-dollar operation coving 49 major types of commodities ocured from 51 foreign countries and states. Those are the high spots in the first comprehensive report MRC as felt free to make on its operations. Varied Activities—The demands of the depicted in the names of metals, any of them little known outside the tetallurgical field, that Metals Reserve as bought: iridium, zircon, kyanite, smium, palladium, rhodium, lithium, trontium, rutile, and ruthenium.

But the buying of little known elements has been a small part of the real db. Nor has stockpiling for war been he whole story. Beyond assuring supclies of critical materials, Metals Receive has been required to stabilize the mices which industry was obliged to my, and (along with the British) it has done a good bit of buying simply to keep materials from the Axis.

• Millions in Subsidies—The production-stimulating, price-regulating subsidies paid by MRC on copper, lead, and zinc under the premium-payment plan came to \$151,200,000 in the agency's first four years and four months of operations. For example, the price of zinc has been held at 8½¢ a lb. (St. Louis) during the war, but domestic mines in 1944 actually averaged a shade over 11¢ a lb. for their total production, according to metal trades estimates.

The current Metals Reserve report listed total expenditures from formation June 28, 1940, to Oct. 31, last, at \$2,041,350,000. Income, principally from sales of metals and minerals, came to \$1,086,393,000, while inventory and other assets were \$655,000,000. Deducting sales and retained assets from total expenditures would seem to leave Metals Reserve out of pocket some \$299,845,000.

• Not All Deficit—However, of this deficit, \$151,200,000 must be charged to premium payments to stimulate metal production. And, by the same token that the Treasury was out the \$151,200,000, fabricating industries saved that much on their purchases of raw materials and presumably passed the bulk of the saving along to Uncle Sam on the war equipment produced for him.

Why there's
NEVER A SHADOW OF DOUBT
on the Quality of
SIMONDS SAWS, KNIVES, FILES

This single 5-acre room is the "world's first windowless plant." And since 1939, windowless plants have been built all over the country, because Simonds proved that the idea was a startling stimulant to production. Startling, too, is the lighting system that provides absolute uniformity of shadowless light for each workman, wherever located—a system that does not tire trained eyes.

In this room, a blanket of uniform fluorescent light delivers 20 to 25 foot-candles to the working plane from all directions. It's like clear June sunlight, and it stays that way all day, all night, all year.

This system, together with the automatic air conditioning and noise-control systems, keeps personal efficiency of workers at highest peak. And this pays off in the extra quality of every Simonds production tool. The cutting edge is better to begin with, and testing and inspection are much more effective under these ideal conditions. That's why Simonds Tools cut more cleanly and easily ... why they last so much longer.



PRECISION INSPECTION AND MANUFACTURING



WISUAL GAGE, available in six amplifications, for checking external dimensions both in process and final inspection. Angularity of surfaces, angularity between a surface and a bore, surface run-out, pitch diameter of screw threads, internal dimensions, and other critical conditions can be checked with the use of standard and special accessories.





SHEFFIELD MULTICHEKS inspect from 2 to 20 and more dimensions (both upper and lower limit) simultaneously in one operation. Savings in time, floor space, inspection and production costs normally offset the cost of a Multichek in from 6 to 12 weeks.

THE PRECISIONAIRE is a flow-type air gage for measuring internal and external dimensions, bell mouth, out-of-round and average diameters of through, blind and step holes. It checks both GO and NOT GO limits in one pass very much faster and with 10 to 40 times less gage wear than can be done with fixed size gages. The human element of error does not enter.



THE SHEFFIELD IN-TERNAL - EXTERNAL MEASURING IN-STRUMENT with Electricipus.



TYPE C AIRSNAP for checking ex-





Multi-ribbed wheel, crusher roll and work part.



THE SHEFFIELD MICRO-FORM GRINDER grinds any flat or circular form tool, profile work or wheel crusher rolls to an accuracy of .0003" directly from a 50 to 1 layout drawing—ne template required. It saves up to 75% in machine time over conventional methods, especially on carbides.

This is the SHEFFIELD PRECISION THREAD AND FORM GRINDER using the amazing crusher roll method of dressing a multi-ribbed wheel for the production of threads or forms by either plunge or traverse grinding. Can also be used as a conventional single point grinder.



A Point for Ickes

Mine operators are more eager to have Leadville tunne finished than they are to press their fight against royalties.

Some Colorado mining leaders have always resented Secretary of the Interior Harold L. Ickes' insistence on collecting, through royalties on the value of ore, for the benefits expected to be conferred by the deep-drainage tunnel being driven by his Bureau of Mines under the drowned-out mines of Leadville.

The tunnel is designed to unwater the mines and make accessible several million tons of ores which contain lead, zinc, copper, gold, silver, and some manganese.

• Without Legal Strings—The \$1,400, 000 appropriation (BW—Dec.4'43,pl9), which at that time was expected to complete the tunnel, was granted by Congress as a war-measure, without legal strings attached. Attempts by Ickes to compel eventual repayment were denounced by several senators, as well as by Colorado operator representatives, at a hearing of Sen. Pat McCarran's Public Lands subcommittee in Denver.

Ickes, however, insisted that under a ruling of the Comptroller General, he was compelled to try to get the government's investment back.

He also insisted that he had authority to collect under the Colorado minedrainage act of 1935, which says mine owners shall pay for drainage benefits, and outlines the method of payment. Moreover, he withdrew from entry the public lands still remaining on some eight square miles round the tunnel-mouth, to avoid speculation.

• Difficulties Encountered—The tunnel-drivers, operating by contract under Bureau of Mines supervision, ran into all sorts of difficulties. They encountered underground shales, mud, and water-flows that at one time compelled them to back up and seek a new route. Whereas the tunnel was to have been completed this spring, less than a mile of its eventual 17,000 feet has been bored.

This winter a bill went through the Colorado Senate a flying. It provided that the repayment provisions of the Colorado mine drainage act should not apply where the drainage is provided by the federal government or where it uncovers new ore.

Clearly it was intended, even ex post facto, to apply to the Leadville situation. But the operators there held a

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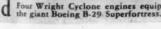
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Three-fourths of all the supplies flown over "the Hump" into China have been carried by Curtiss Commandos.





Home again! One of more than 5,000 wounded flown to U. S. monthly by the ATC. Among the flying ambulances that are helping to save the lives of Americans throughout the world is the Curtiss C-46 Commando.

The U.S. Navy's Martin Mars, world's largest flying boat, is powered with Wright Cyclone engines harnessed to Curtiss electric propellers.





AN AMAZING STORY OF AIR TRANSPORT AT WAR

Barely five years have elapsed since the first trans-Atlantic airline schedule was announced. It offered three trips a week to Europe by air! Today, the big pond is a short haul, and countries have become whistle stops. There's a trans-Atlantic take-off every 13 minutes of the day and night . . . a trans-Pacific flight every 90 minutes daily . . . a Curtiss Commando over "the Hump" on China's aerial Burma Road every 15 minutes, around the clock. Yet this is only part of the amazing job being done by U.S. airlines and the transport wings of our

armed services. In the time it takes you to read this article, some 3,000 miles will be flown by American transport planes. They will evacuate wounded . . . more than 500,000 sick and wounded have been moved by U. S. planes since 1942.

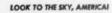
They will transport cargo . . . one major U. S. air terminal reports an average of 1,800 cargo shipments daily.

They'll carry passengers, over a billion passenger miles annually, on 160,000 miles of global air routes.

Few Americans are yet aware of the full meaning of all this to our way of life, to our outlook and to our incomes, but these facts are significant: The best estimates indicate that there will be 20 million airline passengers within three years after the war, at rates you are used to paying for first-class travel by rail . . . The chances are you will travel by air!

Such equipment as the new Curtiss Commando can profitably transport air cargo at a small fraction of pre-war rates . . . The chances are you will ship by air! With millions of jobs resulting either directly or indirectly from American aviation, and with

business already basing its plans upon planes . . . the chances are you will profit from the air!



CURTISS-WRIGHT

AIRPLANES WRIGHT ENGINES PROPELLERS

meeting and disowned the bill by a vote of 14-8, which effectually killed

its chances.

• The Reason Why-Last week the reason became clear: Senators Eugene D. Millikin and Edwin C. Johnson of Colorado appeared before the House Appropriations Committee to favor an appropriation of \$1,600,000, asked by Ickes' Bureau of Mines, to complete the Leadville tunnel.

In the Radio Race

Western Union wins O.K. on the experimental use of high frequency relays in place of wire lines, at regular rates.

Another contender has entered the race being run by leading electronics companies which seek to cash in on very high radio frequencies (BW-Mar. 24'45,p23)-a competition that has been stimulated by the military's secret successes with such frequencies.

The Federal Communications Commission last week gave permission to Western Union to make experimental use of radio relay stations in place of wire lines for its regular traffic. Rates and charges are to be the same as for

the wire lines.

• New York-Camden System-The company had requested authorization to go ahead with construction of relay stations between New York and Camden, N. J., with unattended radio stations at New Brunswick and Bordentown, N. J. These intermediate stations will have four transmitters apiece, and New York and Camden two transmitters.

The frequencies involved, from 2,000 to 11,372 megacycles, have never been used for communications purposes, but have been found extremely useful for such military purposes as radar. A maximum power of 15 watts was authorized

for each station.

Facilities expected to be made available by the radio chain of stations include all types of transmissions except television. Multichannel telegraph, teleprinter, facsimile, business machine service, and telephone communications can be handled over the system.

• Interoffice Phone Service-The telephone service would not be available to the public, but would be used for

interoffice communications.

If present plans can be carried out, each radio transmitter will handle 32 communications circuits, each equivalent to a normal telephone voice circuit in frequency width. This involves use of a new system of modulation, developed but not yet announced by RCA.



At a recent meeting four heads of the Dresser Industries "family" of 13 all firms discussed plans for meeting postwar competition in industrial and con sumer markets. They are (left to right): Lyle C. Harvey, president of Broad Heater Co.; H. Neil Mallon, president of Dresser; J. B. O'Connor, executive vice-president, and H. P. Boncher, general manager of Dresser Mfg. Division

E Pluribus Unum

Method whereby a small business can acquire benefits of bigness is being demonstrated by Dresser Industries, Inc.

The outcry on behalf of small business has evoked much sympathetic oratory in Washington, where politicos are busy with schemes to underwrite with tax money the little man's survival. Less noise attends management's efforts to meet the threat. For one thing, the current absorption of small companies by large ones isn't what Washington has in mind. But in manufacturing there appears a new form of union-for-strength that may indicate a future trend.

• Under Single Umbrella-It involves the mobilization of small to mediumsize companies on an equal footing under a single corporate umbrella. A recent example is Continental Industries (BW-Oct.7'44,p66), which is a combination of twelve concerns. An older company that is also assiduously engaged in adding recruits is Dresser In-

Dresser announces the acquisition of three new companies bringing its total to 13. To tighten further its lines for the competition that lies ahead, Dresser on Mar. 19 moved its administrative

headquarters from Bradford, Pa., to the Terminal Tower, Cleveland, and als gathered together its scattered No York offices at one address in the Chanin Bldg.

In 1925 the Dresser nucleus had net proft of \$539,157 on net sales \$2,945,289. For 1944 Dresser's net sale were \$54,995,408 and its net prof \$1,656,359. The member companie now have some 6,000 employees.

• The Man Who Did It-The man back of this showing is H. Neil Mallon president. Mallon was born in Cincin nati in 1895, got a Bachelor of Scien degree at Yale, served in the first World War, and became one of its youngest majors of artillery. He got his first business experience with Continental Can and United States Can and became the president of Dresser Industries in

Mallon likes to refer to Dresser as "a family." It represents an "affiliation of free enterprises with kindred interests." When a company is taken over, the management is retained along with the other assets. Each company preserves its identity of operation, receiving the benefit of over-all planning, financing,

and executive skill.

There is no regular conference of unit heads with top ranking officers though contact is constant. A member company can call on the Dresser Industries advisory staff, which includes specialists in manufacturing, engineering, accounting, marketing, distribution, labor



Getting ready for the big wind

A steam turbine is a windmill. This
Joshua Hendy steam turbine, when
completed, will be turned by an 1800
mile-an-hour gale of superheated
steam. It will furnish the power to
propel a 12,000-ton ship. It must be
built in quantity to meet wartime
demands. Its making must be highly
precise — tolerances are as close as
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We combine speed of manufacture with this high precision through unique production methods. For instance — we have developed a giant boring mill which faces and bores gear bearing holes

five at a time, doing in three days what once took three weeks. And an ingenious jig enables us to turn out 86 turbine blades in the time normally required to produce seven.

Joshua Hendy ingenuity in design and skill in manufacture are resulting in the production of ever-finer power equipment including turbines, turbo-generators and Diesel engines.

Our nearest office will welcome your inquiry. Write to Sunnyvale for a copy of our booklet, This is Hendy, now on the press.

Joshua HENDY

Armen Offices: BOSTON - BUFFALO - CHICAGO - CINCINNATI - CLEVELAND - DETROIT - LOS ANGELES - NEW YORK - PHILADELPHIA - PITTSBURGH - SAN FRANCISCO - WASHINGTON





CHECK YOUR ANSWERS HERE:

4. Fiction. That's a popular local joke, but the name is actually from the Indian language and means "flowing water". Some N. P. towns and cities were named for soldiers who guarded the railway's survey parties (e.g. Custer, Miles City) . . . others for early N. P. presidents (Billings, Perham, Villard, Oakes, Hannaford) . . still others for pioneer railroad workers, their daughters and wives. Eltopia, Washington was first named Eltopai ("Hell-to-pay") because a cloudburst washed out the railroad there, during construction days.

2 Fiction. The fringe, a safety device which warns trainmen on tops of cars to duck instantly, is called a "tell-tale". A "shoo-

fly" is a temporary track built around an obstruction.

3. Fiction. Fish plate was name given oldtime rail fastening, now known as joint bar. It takes more than half a million of them to link the N. P. main line from St. Paul to the Pacific.

4. Fact. High, grassy plateaus in these hills once supported thousands of spirited horses. Today most have disappeared. However, Northern Pacific carries wheat now grown high in Horse Heaven.

5, Fiction. As the Northwest grew, many of its important population centers flourished on the Northern Pacific—thus, the line has become the "Main Street of the Northwest".

relations, taxation, insurance, other technical fields.

• As Mallon Sees It—Here is how Mallon Sees I

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"Each of our companies is of a size that is best suited for efficient management. The men in authority are close enough to each operation to know what is wrong are in positions of authority to correct the trouble.

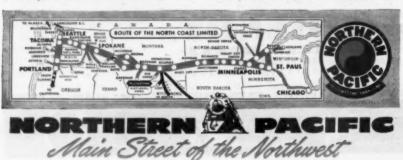
"Companies, if they get too large, become inefficient because the men close
to operations who know what corrections are needed are not in a position
to make them, and those who are the
bosses and can act don't know how to
act because they are too far removed
from reality."

• Latest Recruits—Dresser's recent additions are California companies: Day & Night Mfg. Co. of Monrovia; Payne Furnace & Supply Co. of Beverly Hills; Kobe, Inc., of Huntington Park. Day & Night makes gas-fired water heaters; Payne produces steel furnaces and floor furnaces for the consumer durable goods field. The two supplement Dresser's Bryant Heater Co., which manufactures gas-fired boilers, air conditioners, etc.

Kobe's principal product is a revolutionary engine-driven pump which is placed at or near the bottom of oil wells to force the crude to the surface. · Naturally Related-Kobe fits in naturally beside Pacific Pumps, Inc., and by Clark Bros. Co., Inc., which makes engines and compressors. Other Dresser industries include: Dresser Manufacturing (pipe couplings and fittings); International Derrick & Equipment Co. (oil well drilling and pumping supplies); Roots-Connersville Blower Corp.; Stacey Bros. Gas Construction Co. (gas holders, standpipes, storage tanks); Bovaird & Seyfang Mfg. Co. (pumping engines, jacks, other oil field equipment); Van der Horst Corp. (patented chromium lining for cylinder walls); Dresser Mfg. Co., Ltd. (the Canadian unit).

Dresser usually is described as catering to the oil, gas, and water industries. But recent acquisitions show that headquarters thinking is taking in the consumer market. Signs point to a home building boom after the war, and Dresser intends to be in on it.

• Stock Split Voted—Dresser acquires new properties through exchange of stock. To implement this policy, the last stockholders meeting (Mar. 19) voted a two-for-one split of common stock bringing the total to 1,200,000. It also authorized an additional 1,200,000 shares or a total of 2,400,000. The stated object is to bring more companies into the Dresser organization. The new stock was listed on the New York Stock Exchange this week.



BUSINESS WEEK . Mar. 31, 1945

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WPB Aircraft Division will act as first claimant agency for the air transport industry in effort to get new planes.

Pleased as they are to have some of their old planes returned by the military services (BW-Mar.24'45,p22), the hard pressed U. S. airlines have long been pleading for new equipment, to handle swollen wartime traffic. This week the airlines did something about it. An Airline Industry Advisory Committee was created to work with the War Production Board's Aircraft Division in laying the ground work for acquisition of new planes.

• Reconversion Too Costly—Airline officials agree that reconversion of military aircraft for airline use is uneconomical, in cost and operation as well as in manpower necessary for conversion. In this they have the support of government officials whose voices will carry weight

in final decisions.

The airlines point out that it requires a higher degree of skill to dismantle an airplane and recondition it thoroughly than it does to make new planes. The number of man-hours required for reconversion varies from 12,000 to 20,000, with the average somewhere between. Reconversion costs run between \$35,000 and \$150,000 depending on the extent of the job.

• Virtually Rebuilt—Planes returned to the airlines from military duty are virtually rebuilt from the airframe out. Airline men argue that even then, they still have an obsolete-type airplane, at least

eight years old.

In addition to reconversion costs, the airlines pay around \$8,000 a year to lease the airplane from the government surplus agency, which boosts the cost considerably. When it is considered that the airlines plan to use these converted planes only until new ones are available, the cost graduates upward, depending upon the length of time the converted plane is operated.

It has been variously estimated that a new DC-3 type, most common on commercial airlines, would cost between \$110,000 and \$115,000, and perhaps less if built on currently operating production lines. Before the war the cost was around \$100,000; after the war the

ost probably will be more.

ODT Delegates Authority—Encouraging to the airlines is the agreement of the Office of Defense Transportation (the claimant agency for all types of transportation equipment—surface, water, and air) to delegate to the WPB



"YOU'RE RIGHT, STEVE _ KELLYS ARE HARD TO BEAT!"



You can't beat a reputation like Kelly's—51 years of dependability. The Kelly Truck Tire, redesigned to take full advantage of new materials available, is as fine a tire as can be made today. Craftsmen with many years of experience are turning out Kellys in the completely modernized plant, with the latest improvements in metheds and machinery. But until mounting military requirements are met, tires for even essential civilian use will be scarce, so make yours last. Your Kelly Dealer can help you. He's a tire "specialist"!

THE KELLY-SPRINGFIELD TIRE COMPANY
Cumberland, Maryland

KELY

TRUCK TIRES

Proved and Improved for Over Half a Century





Packaging Specialist

With Field Men who know Packaging

The field representative of U.S.E.'s new Kellogg Container Division is worthy of the title "Packaging Specialist" which appears on his card.

He is a man who knows packaging from beginning to end and is qualified to sit down with you and help to solve your container problems.

Back of him, of course, are the full resources and engineering knowledge of this newest division in the U.S.E. family.

Through him, you can secure the full benefits of war-born experience in water-moisture-vapor-proof materials as used in heatsealable containers, bags, boxes and envelopes, in transparent and translucent materials and plastics.

UNITED STATES ENVELOPE COMPANY 14 Divisions from Coast to Coast





Aircraft Division the authority give under the President's executive order December, 1941, so far as the transportation industry is concerned.

The air transport industry never h had a claimant agency to fight its by tles, and consequently never has had presentation made on the needs of ne equipment, the materials and manpow necessary to provide that equipment.

WPB's Aircraft Division, headed h Henry Nelson, on leave from International Harvester, will now act claimant agency and all requests for ma terials and equipment and necessar manpower will be geared to war nece sity. Thus, for the first time-and tar-dily in the opinion of many observersthe air transport industry is placed on a war necessity basis.

• Part of War Program-Nelson emphasizes that any new planes authorized will be built as a part of the manufacturers' war production program-and not as part of any postwar reconversion plan, since the output will be distributed among the airlines on an essential war transportation basis. He contends that production of new airline planes is as necessary to the over-all wartime transportation system as the building of new locomotives or freight cars.

Conversion of military planes will continue until the program is approved. There are obstacles still to be overcome, but WPB's Aircraft Division is confident that it can make a convincing case, and the airlines see daylight ahead for the first time in months.

• Requirements Listed-All U. S. airline operators are being polled for detailed estimates of their aircraft needs. They are being asked for information regarding types of planes required, the manufacturers and model designation, and required deliveries by quarters beginning with the fourth quarter of 1945 and ending with the fourth quarter of

This information is based on the assumption that enough new aircraft to meet essential war transportation needs will become available beginning with the fourth quarter of 1945, that operations will be restricted to presently approved route mileage, and that models now in production are the only planes that will be available.

RAILWAY ASKS AIR ROUTES

One of the first railroads to announce detailed plans for integrating ground and air transportation after the war (BW-Mar.24'45,p52), the Chicago, Burlington & Quincy revealed last week that it has asked the Civil Aeronautics Board for permission to establish nine helicopter feeder routes.

The lines would be operated by a

BUSINESS WEEK . Mar. 31, 1945

CB&Q. Transporta to spend \$ on addition year's open mists figu first year's slight prof As its h has engage of Rota p18), wh the comp

FISH IN The fi

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C.B.&Q. subsidiary, the Burlington Transportation Co., which is prepared to spend \$1,300,000 on equipment, and in additional \$1,200,000 on the first year's operation. The company's economists figure that if they can hold the first year's expenses to that figure, a slight profit can be realized.

As its helicopter consultant, the road has engaged Agnew E. Larsen, president of Rota Wings, Inc. (BW-Aug.7'43, p18), whose eight-passenger "airbus"

the company plans to use.

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FISH INDUSTRY ORGANIZES

The fish industry's troubles are many, and to cope with them, a national association of producers, processors, canners, and wholesalers is being organized. R. M. Meehan, Washington (D. C.) fish broker, president; Elliott Hudgins of Gorton Pew Fisheries, Gloucester, Mass., treasurer; and Irving G. McCann, Washington lawyer, secretary, are acting as temporary officers. Permanent officers, bylaws, and plans for the group will be made when contributors meet Apr. 10 in Washington.

Objectives will be research, advertising and marketing campaigns, similar to those of the American Meat Institute, and unified handling of industry problems with the 23 government agencies that deal in fish (BW-Dec.16'44,p40). Hitherto, the independence of men in the industry has prevented pooling of interests.

Both McCann and Hudgins say they expect to retire from the scene when the new association has been launched. McCann was recently special counsel for the House Committee on Merchant Marine & Fisheries. Hudgins used to be with OPA.

UNIQUE WAREHOUSE

An unusual cold storage warehouse now being operated in Normandy by the Army Quartermaster Corps in many respects is similar to the War Food Administration's storage project set up in an abandoned limestone mine near Atchison, Kan. (BW-Mar.3'45, p.55)

The QMC installation makes use of three vast tunnels, 50 ft. underground, 250 ft. long, and 30 ft. high, with four sizable lateral bays opening off of each. They were excavated by the French in 1928 for use as ammunition dumps, and when the U. S. Army took over after D-Day, the Engineers installed a system of overhead ammonia pipes and a Freon cold-blowing apparatus which maintains a constant temperature in the tunnels of about 14 F.

As much as 3,000 tons of fresh meat can be stored at one time.

When Disaster

struck Hartford at 3 p. m.



Ample time for the Oregon Journal to bring its Portland readers complete details of the tragic circus fire...

the same afternoon it happened!

Day in and day out Portland families rely on The Journal, Portland's afternoon newspaper, for news the same day it happens.

You see, when The Journal goes to press it's only early afternoon in Portland, but the business day is done in Washington and New York; and it's midnight or later in much of the rest of the world. This natural time advantage, enjoyed exclusively by afternoon newspapers on the Pacific Coast, enables Journal editors to bring their readers all the news, hours ahead!

Little wonder then, with everyone eager for last minute news, that The Journal today, as it has been for years, is the preferred newspaper in Portland* and its retail area. This fourth largest Pacific Coast market has a population 34% greater than all the rest of Oregon. Here The Journal delivers 13,361 more circulation than any other newspaper... concentrates 80% of its total circulation, now the largest in its history!



Hational Representatives REYNOLDS-FITZGERALD, Inc., New York, Chicago, Detroit, San Francisco, Los Angeles

*Thousands of exciting facts about the buying habits, preferences and posturar plans of Portland families are contained in the recent study of "The Portland Consumer Market." It was made expressly for the Oregon Journal by the research department of R. L. Polk of Co. and is available exclusively through The Journal or its national representatives. A request on your business letterhead will bring you details.

Is Your **Business** Listed Here?

Adhesives Advertising display Air conditioning Aircraft Apparel accessories Automobiles Bathroom fixtures Bonta Building construction Cameras Clocks Combs Communications equipment Electrical equipment Electrotypes Farm equipment Firearms Floor coverings Hardware Heating equipment Hearing aids Household appliances Interior design Jewelry Kitchenware Luggage Lighting fixtures Machinery Motors

Optical supplies Office equipment Packaging Phonographa Photo equipment Plumbing Plywood Protective coatings Printing Radio Railroad cars Rainwear Refrigerators Sanitary supplies Scientific supplies Shavers Signs Smoking equipment Sports equipment Surgical instruments Tableware Television Textiles Trucks Toys
Upholatery
Vehicles
Vending machines Venetian blinds Washing machine

X-ray equipment

If your business is included above, it's inevitable that you're going to be affected in one way or another by the new war-developed plastics. Either you'll be putting plastics to work for you . . . providing your product new sales appeal, new performance standards . . . or your competition will be putting plastics to work against you.

Since the war began there have been innumerable important plastics developments you should know about . . . many of them made by Monsanto, e.g. Cerex, the first heatresistant thermoplastic, Styramic HT for high frequency insulation, Thalid for impression molded forms in larger sizes and more intricate shapes than ever before possible. To keep you abreast of these and others among Monsanto's versatile and growing family of plastics, we invite you to place your name on Monsanto's mailing list. Address: Monsanto Chemical Company, Plastics Division, Springfield 2, Massachusetts.



PLAIN TALK ABOUT PLASTICS | WAR BUSINESS CHECKLIST

A digest of new federal rules and regulations affecting priorities and allocations, price control, and transportation.

Increased Civilian Supply

Farmers will have an additional 22,000.-000 b, ft. of lumber in the second quarter of 1945 for use in emergency repairs and maintenance of farm dwellings. War Food Administration will assign preference ratings of AA-3 on this lumber, which has been transferred from the lumber allotted to WPB's Office of Civilian Requirements. In the first quarter of the year, WPB allotted 15,000,000 b. ft for this use.

- Lard-To relieve the shortage of lard for essential civilian needs, WFA has reduced by two pounds (from 7½ lb. to 5½ lb.) the amount of lard to be set aside from each 100 lb. of live hogs slaughtered by packers operating under federal inspection. (Amendment 10, WFO 75.3.)
- Motion Picture Film-Quotas for the use of 35-millimeter motion picture film in the second quarter of 1945 for the production of entertainment pictures distributed on a nationwide basis are expected to total 261,-000,000 linear ft., as compared with the 255,997,440 linear ft. allotted for this use in the first quarter. Newsreel producers and distributors will receive 53,000,000 linear ft., the same amount as their first-quarter allocation.

Decreased Civilian Supply

Provisions of WFO 75.2, requiring packers operating under federal inspection to set aside for government purchase 70% of utility grade beef for canning, have been extended to include packers in California, Oregon, and Washington. These states were previously exempted from the increased set-aside order because they lacked canning facilities (BW-Feb.17'45,p81).

• Cotton Bandage Cloth-To increase the production of cotton bandage cloth for military surgical bandage, and food processing needs, WPB has ruled that all looms which produced bandage-cloth on Sept. 30, 1943, and have since gone into other textile production must return to bandage production Apr. 1, and has further directed the hours-per-week operation of such looms. (Direction 4, Order L-99.)

Tightened Restrictions

A limited volume of malleable iron castings to be delivered before July 1 for use in the production of farm machinery and equipment will be uprated to AA-1. Manufacturers who are behind schedule on these items because of a shortage of malleable iron castings should apply immediately to WPB's Farm Machinery & Equipment Div. for AA-1 assistance.

• Cotton Textiles-Beginning Apr. 2, mills making combed cotton yarn fabric must

reserve at least 50% of their poundage pro duction of combed sliver for yarns suitable for required military fabrics. Beginning Apr 16. all twister spindles in these mills my be used to produce only ply combed yarm suitable for the military fabrics called for in Schedule A of Direction 11, Order M-317, Each mill must produce at least as man yards of each of the specified fabrics as a produced in the fourth quarter of 1944. Looms making the fabrics on the date when the direction takes effect are frozen to those

- Steel Drums-A new federal specification for a 55-gal. steel drum will enable manufacturers to concentrate on the production of a single design for all military and government orders for these drums. Copies of the specification, which has been issued by the Director of Procurement, Treasury Dept., may be obtained from the Superintendent of Documents, Government Print. ing Office, Washington 25, D. C.
- Phthalic Alkyd Resins-Producers' and consumers' inventories of phthalic alkyd resins, supplies of which, WPB reports, are dangerously low, will be reduced to approxi-



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Andover-Kent Aviation Corp. Elmira, N. Y.

Boston Wire Stitcher Co. East Greenwich, R. I.

Bachmann Spark-Wheel Corp. Long Island City, N. Y.

Continental Can Co. (Two plants) Diamond Tool Research Co.

New York, N. Y. Electro Metallurgical Co.

Ashtabula, Ohio Ford Motor Co.

St. Paul, Minn.

Massey-Harris Co. Racine, Wis.

Steel Tank & Pipe Co. Berkeley, Calif.

Unexcelled Manufacturing Co., Inc. Reading, Ohio

Victor Adding Machine Co. Chicago, Ill.

Vogt Manufacturing Corp. Rochester, N. Y.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)

Dangerous Curves?

Not if it's youngstown tinplates

THIS jar cap started as a piece of Youngstown Electrolytic Tinplate. Here it is, extremely intricate in profile, but perfectly formed--ready to seal and give lasting protection to your food product.

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Converted from the flat sheet in two swift automatic operations, this complicated steel band has its inner circumference turned 180° into a smooth edge, its outer edge rolled into a flawless bead, its sidewall pressed into an accurate screw-thread with knurling formed along the top. This is one of the most involved processing jobs to which tinplate is ever subjected, yet the outcome is practically perfection—in millions and millions of caps.

Dangerous curves formed in this tinplate --

potential points of weakness, breaking, corrosion? No, because the tinplate is literally custom-made by Youngstown to do this job.

The steel is so ductile, so uniform in gauge and strength, that it flows into the fabricator's forming dies, without a crease, check or crack. The surface finish of the steel and the tin coating is "made to order" likewise--to insure positive adherence of lacquer, to provide dependable protection against moisture penetration and corrosion.

When you seal your foods with caps made of Youngstown Electrolytic Tinplate, you are giving them sure protection, to safeguard their goodness for full enjoyment by the ultimate consumer.



YOUNGSTOWN Electrolytic Tinplate

THE YOUNGSTOWN SHEET AND TUBE COMPANY YOUNGSTOWN, OHIO

CARBON, ALLOY AND YOLOY STEELS

Products - Sheets - Plates - Conduit - Bars - Roda - Wire - Naile-Tip Plates and Spikes - Alloy and Yeloy Steels.



EVERY DAY—at the fatigue point in each shift—every Thermoid employee is served a container of energizing milk. And the workers enjoy a relaxing "seventh inning stretch" as the containers are handed around at machine, bench and desk.

How did we come to put the milkman on our payroll?

One answer is found in the results of his visits . . . the noticeable improvement in the health of both plant and office workers . . . the steady decline in fatigue-born accidents . . . the equally steady, over-all rise in the quality of Thermoid production.

Another important reason, however, was the unique spirit of cooperation that governs all activities here at Thermoid. Long ago, we learned that the sides of the business triangle—the employer, the employee and the customer—are held together by common interests . . . that retarded functioning of one impairs the useful strength of all.

Thus, the idea of free milk each shift is neither paternalism nor soft persuasion in the minds of Thermoid workers; but is welcomed by them as a common sense way of meeting a mutual problem. And that is the spirit that makes our customers say: "It's Good Business To Do Business With Thermoid."

Thermoid Rubber

DIVISION OF THERMOID COMPANY
TRENTON, NEW JERSEY

DON'T PUT IT OFF TIL TOMORROW— Buy More War Bonds Today!

THE THERMOID LINE INCLUDES: TRANSMISSION BELTING . F. H. P. AND MULTIPLE V-BELTS AND DRIVES . CONVEYOR BELTING . ELEVATOR BELTING . WRAPPED AND MOLDED HOSE . SHEET PACKINGS. INDUSTRIAL BRAKE LININGS AND FRICTION PRODUCTS. MOLDED HARD RUBBER AND PLASTIC PRODUCTS.

mately a 15-day level in the April allocation of the material. Schedule 59 of Order Malhas been amended to tighten restrictions a sales to users of certain coatings contains these resins.

• Lumber-More rigid restrictions on the use of western pine lumber for military items, and simplified procedures for obtaining western pine and restricted grades as species of hardwood are established by Win Directions 2A and 6 to Order L335, amended. Use of western pine lumber is millwork is now limited to windows, sall window sash and door frames, window and door screens, trim and molding, and or stock for these items.

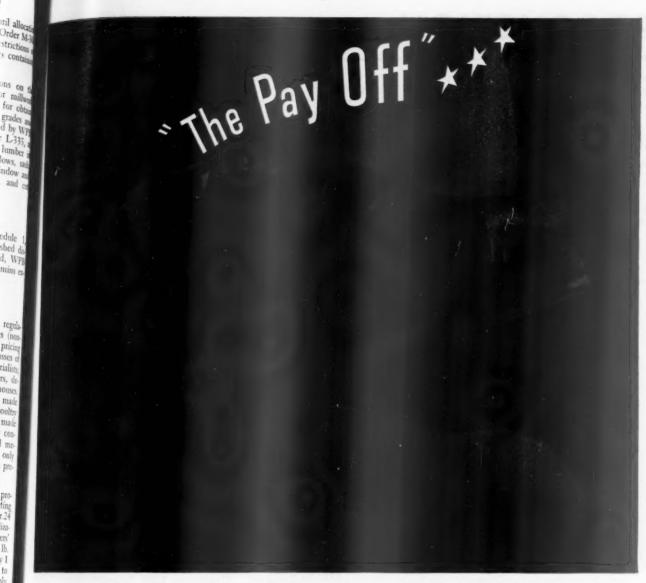
Relaxed Restrictions

With the revocation of Schedule 1 WPB Order M-300, which established distribution control over nicotinic acid, WPI has removed from allocation all vitamins escept Vitamin A.

Price Control Changes

OPA has announced a new price regulation, covering prefabricated structures (non-dwelling), which provides a specific pricing formula for each of the following classes of sellers: retail lumber yards; industrialisty retail dealers; and distributors, jobbers, department stores, and mail-order houses. The regulation applies to structures made principally of lumber, such as poulty houses, barns, and garages. Structures made mostly of metal, brick, cast stone, or concrete are not covered; silos, tanks, and mechanical farm equipment are covered only if they are sold as an integral part of a prefabricated structure. (Regulation 583.)

- Poultry—To encourage farmers to produce more young chickens for marketing during the coming summer (BW—Mar.²4 '45,p24), the Office of Economic Stabilization has authorized increases in producer ceiling prices averaging about 1½ per lb. Increases, which will be in effect from July 1 through Dec. 31, will range from .5¢ to 1.6¢ per lb. in various areas and will apply to broilers, fryers, and roasters.
- Hay—Nationwide dollar-and-cents ceiling prices that reflect parity to producers have been established by OPA on all types of hay at all levels of distribution. The new ceilings go into effect May 1. Formerly, alfalfa hay was the only hay under price control. (Regulation 582.)
- Wine—Sales of wine to bottlers under a franchise bottling agreement will be permitted until Aug. 1, 1945, at ceiling prices applicable to packaged wine, provided that the agreement was made before Mar. 21 of this year. Under franchise bottling agreements, wineries ship bulk wine to bottlers, retaining title until the wine is bottled; at the ceiling prices for packaged wine less bottling charges. After Aug. 1, wineries that transfer title to the bottler of packaged wine cannot obtain more than the ceiling price for an equal quantity of bulk wine. (Amendment 24, OPA Regulation 445.)



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This boy tried hard—but he lost.

He was searching for something. In his simple way, he believed he'd find it in the prize fight game. But he didn't seem to have the Big Plan thought out, or something. He lost. It's that way with people, with organizations, with nations. To survive, we've got to do a lot of thinking. This is a time for it—individually and collectively.

Because this is the Second World War. A Third might reduce all of us, our hopes, our essential rightness, to a pile of ashes. This is a time for straight thinking.

We at Bryant have been trying to see things straight. Some time ago we realized that as essential suppliers to industry we had better have a pretty solid plan. A plan based upon search and research—upon a knowledge of new and better methods of building the needed things of peace—upon service to all comers who might use our specialized knowledge to build a better America. That seemed a good plan, and it has been.

For today, our engineers are working with the engineers, designers and planners of scores of successful American businesses, and many new ones, large and small—helping them to plan now, conversion of their plants, skills and machines to all-out production of new and better products for a prosperous peace.

If you are a manufacturer, we invite you to call us in today.

PRODUCTION

Railroad Battle: Coal vs. Oil

Diesel-electric progress forces roads, particularly coal carriers, to push engineering research on turbines and other new motive power. Competition in fuels provides another impetus.

That young upstart in the field of railroad motive power, the diesel-electric locomotive, is beginning to force the big coal-carrying roads and coal producers to bestir themselves.

As a result, 1945 promises to produce more engineering research on locomotives than has any year since 1829, when steam power first was used on railroads

of the United States.

• Near and Far Views-Results of some of this work may be felt speedily, especially where they involve refinements of existing equipment. But some of the research is long-range, involving developments or adaptations of -powerproducing machines which are new to the rails. The gas turbine locomotive and the direct-drive diesel are in this

Motivation for this new competition in engineering research proceeds mainly from: (1) desire of newcomers, notably diesel manufacturers, to obtain an increasing share of the business, and (2) belated realization by the dominant coal carriers and producers that increased use of competing fuels will curtail their heavy traffic in coal. (Truck, bus, and airline competition are added stimu-

• Coal Carrier's Stake-From 30% to

35% of all tons of freight originated and hauled by American railroads is coal, so the coal-originating carriers have a major stake in its continued use as

locomotive fuel. One-fifth of all the coal mined in this country is consumed by steam locomotives, which explains the mine operators' vital interest in maintaining coal as the dominant fuel for rail motive power.

For the first century of railroading in the United States, the conventional reciprocating steam locomotive stood unchallenged. Diesel made its appearance in 1924, when a switch engine was put into service. A combination product of Ingersoll-Rand (diesel engine), General Electric (electric generator, motors, and components), and American Locomotive (engine structure), it is reported still operating for the Central R. R. of New Jersey.

· Significant Trend-The big expansion got under way ten years later, heralded introduction of diesel-powered streamliners on the Burlington (BW-Apr.28'34,p12) and Union Pacific (BW Feb.17'34,p12) railroads. At that time there were some 100 diesel switchers

An example of the rapid growth in diesel use is provided by the Santa Fe Railroad, which now has an all-diesel division (except for local trains) extending 459 mi. from Winslow, Ariz., to Barstow, Calif. The Santa Fe's diesel fleet includes 68 freight and 15 passenger locomotives and 123 switch engines.

Today nearly 2,400 of the 42,000 locomotives on American railroads are

diesel-powered. Significant, however, it the fact that at the start of 1945 build. ers had on their books orders for twice as many line-haul diesels as they had for line-haul steam units, while 205 diesel switchers were on order versus no steam switch engines.

 Pros and Cons—Present advantages of diesels, railroad men say, are their ability to make longer runs without halting for fuel or water, and to remain in operation longer without attention or inspection, resulting in greater monthly and annual mileage. Further, railroad. ers have found that diesels do less harm to rails and roadbeds, because they do not pound the tracks as severely.

However, their initial cost is about twice as much for a given amount of horsepower, and they require a fairly high grade of fuel oil, whereas steam locomotives can use various grades of solid (or liquid) fuel without too much

effect on efficiency.

Added up, these factors explain why diesels now are favored for switching service and certain long-haul uses, where

high utility is possible.

• Major Projects-Confronted with this increasingly serious competition from the diesel, groups seeking to retain coal in its dominant position as motive power fuel have launched three major research projects:

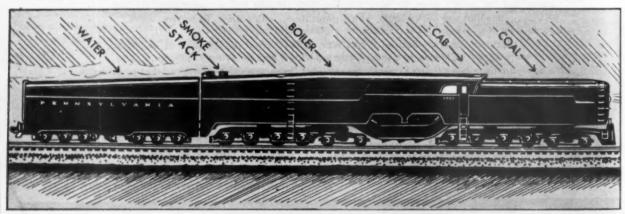
(1) The Pennsylvania R.R., Baldwin Locomotive Works, and Westinghouse Electric & Mfg. Co. have built and are service-testing a 6,900-hp. geared turbine locomotive (BW-Dec.2'44, p63). Initial results of these tests are

said to be promising.

(2) Nine important coal-carrying railroads have put \$1,500,000 into development of a high-pressure steam turbine-

electric locomotive.

(3) Six coal-originating roads and three coal producers, working with Bituminous Coal Research, Inc., are developing a \$1,100,000 project, purpose of which may be to explore the



With coal compartment in front and smokestack at the rear, the 1371-ft. "Triplex" is the latest design of Pennsylvania R.R. engineers in their development of st am turbine engines. Swiveling trucks will permit it to take curves.



A fair question - for the connection may not be immediately apparent. But it's definitely there. For S. S. White flexible shafts are of very real interest. to executives concerned with the design, production and sale of a wide variety

Because S. S. White flexible shafts offer very real possibilities for product simplification-which means easier manufacturing and lower costs-and for product improvement-which means easier sales and more of them. The representative list at the left, gives substance to this statement.

SIMPLIFY AND IMPROVE ? . . . HOW ?

Well, space won't permit us to tell that story here. But it's fully told, with many examples and essential technical data in a 256-page Flexible Shaft Handbook. You may have a copy without charge or obligation if you will write for it, direct to us, on your business letterbead and give your title. No representative will call.



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Research, Despite War

The U.S. holds no monopoly on motive power research. Even during the war, locomotive development has continued.

In France from 1939 to the present time, eight locomotives embodying new developments, each constituting a separate research project, have been built.

One of these locomotives has a system by which power is applied directly to each individual drive wheel, operating independently; another is a steam turbine engine, while the rest are largely refinements of conventional reciprocating engines.

Germany built and tested during the war a locomotive with V-type cylinder arrangement and individual drives on the axles,

Switzerland built the first gasturbine locomotive in 1941. A 2,200-hp., oil-burning unit, it is reported performing satisfactorily. Great Britain built a steam-turbine locomotive a decade ago, and it still is in service.

possibilities of the gas turbine as a source of power (BW-Jul.3'43,p59).

• Locomotive Committee—Another undertaking is that of the "Big Three" builders of steam locomotives: American Locomotive Co., Baldwin, and Lima Locomotive Works. They have set up a technical committee in their jointly sponsored Locomotive Institute.

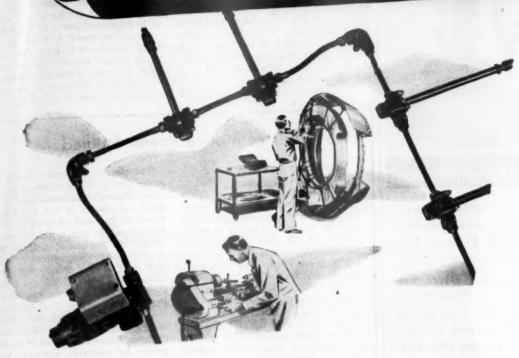
With a small staff of its own, but working chiefly through the research and engineering staffs of its sponsors, the institute is studying reciprocating steam locomotive improvements, as well as steam and gas turbines. It is not concerned with diesel research. However, American and Baldwin are active in diesel production and research.

Firms building electric locomotives and generators and motors for diesels, such as General Electric, Westinghouse, and Fairbanks, Morse & Co., have their hands in various research projects.

• Postwar Prizes—The field is broad, the competition keen, the potential rewards in terms of increased business great. For the railroads, their motive power strained and worn by wartime traffic demands, unable to make normal replacements, are expected to be in the market for plenty of new equipment when WPB bans are lifted.

Railroad men are watching closely the results of operating tests being conducted by the Pennsylvania, which incidentally has just ordered 50 powerful new steam locomotives, on its coal-

A BETTER WAY TO TRANSMIT POWER



Here is a way to transmit power through congested space and produce linear motion at a distant point. It is with Lear Flexible Shaft systems. These systems can provide power to a space so small that it would not permit the use of even the small Lear Actuator.

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In these systems, a Lear Power
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Lear Screw Jacks convert the
spinning motion into a powerful
thrust or pull.

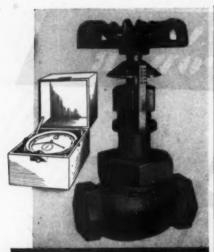
Lear Flexible Shafts are not like any you've seen before. They reliably handle power rotating either way. They're strong

Installation is easy and not expensive. They have no exposed moving parts. They can do the work of solid shafts, torque tubes, pulleys, linkages, sprockets, belts and chains.

The days to come are going to bring a lot of difficult power-transmission and control problems in all kinds of industry. And probably Lear Flexible Shaft systems will solve many of them.

So we're telling you about them now. If you're faced with a problem such as we've indicated, please let us know. Our engineers are eager to share their experience with you.





With clock-like precision

Seldom is the word "precision" rightly used in connection with valves, but the Hancock Flo-Control valve deserves the word.

For, with these valves, the flow may be regulated to an exact amount. Once the setting has been established, it may be returned to at any time with an accuracy as close as onehundredth of a turn of the wheel.

In addition to the control feature, Hancock Flo-Control Valves embody all that is best in modern design, metals and workmanship that contribute to a long useful life.

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HANCOCK

ANNING, MAXWELL & MOORE, INC. BRIDGEPORT 2, CONNECTICUT

burning steam turbine locomotive. Eliminating the reciprocating parts of the conventional steam unit, it gives a uniform flow of power to the drive Its comparative efficiency should be known soon.

 Something Different—Newly designed by Pennsylvania engineers, but not yet constructed, is a radical type coal-burning steam turbine locomotive in which the coal is carried at the front, with the cab, boiler, and water tender following in that order. The smokestack is at the rear of the boiler.

The locomotive (exclusive of the

water tender) will be supported by steel frame mounted on two swivel trucks, one under the coal compa ment and one under the boiler. Ea truck will consist of four pairs of driving wheels and two pairs of guiding whee Two direct drive steam turbines, o for each set of driving wheels, will d velop combined power of 9,000 hp.

The Chesapeake & Ohio has aske WPB permission to build three simil steam turbine locomotives with electric drive, but with 6,000 hp. Designed h the railroad's engineers in conjunction with Baldwin and Westinghouse, which

Five Types of Motive Power Studied

Broadly speaking, there are five types of railroad motive power on which intensive research is under way or is expected to start soon. Three of these types now are widely used by railroads, a fourth is in experimental use, and the fifth is in

the "talking" stage.

• The Work Horse—The reciprocating steam locomotive for a century has been the work horse of the railroads. Nearly 40,000 now are in service. In this, a boiler creates steam which is fed to cylinders. The forward-and-back motion of the pistons is transformed into circular motion through driving rods connected to the drive wheels.

Numerous arrangements of wheels have been developed. The New York Central's latest and most powerful (BW-Mar.17'45,p90) has a 4-8-4 four leading arrangement, with wheels, eight coupled drive wheels, and four trailing wheels. A new Pennsylvania R.R. locomotive has a 4-4-4-4 arrangement, with four leading wheels, two sets of four drive wheels, each driven by a pair of pistons, and four trailing wheels.

Steam pressures usually run close to 300 lb. per square inch on the more efficient locomotives. Higher pressures have been tested, but the difficulty of keeping boilers leakproof under operating stresses made them unsatisfactory in the past.

· Variance in Power-The dieselelectric locomotive consists of an internal combustion engine burning fuel oil, the engine driving an elec-tric generator. This power is applied to motors linked to the drive wheels. The diesel engine varies in power output at varying operating speeds, hence its use to manufacture electric power which can deliver maximum tractive effort over a wider range.

The electric locomotive derives its power from a central source, or power plant, through overhead wires or a third rail, hence is not a self-contained motive unit. It gives an even flow of power over a wide range of speeds, but the cost of installing the electric distribution system is high. It is used chiefly in congested areas where utilization of track and equipment is high (as in the case of the Pennsylvania's New York-Washington line), where tunnels and subway systems make necessary elimination of fumes (illustrated in use of electric power by railroads entering New York underground).

Electric power also is used where steep grades make valuable its high tractive effort (as in the case of the Milwaukee R.R.'s 656 miles of electrified lines through the Rocky and

Cascade mountains).

• Similar to Ship Unit-The steam turbine locomotive, one of which is now undergoing tests, utilizes the same type of power unit that is employed on many ships. Steam from a boiler is fed through a turbine. The power thus developed is applied directly to the drive wheels through gears. One variation under development will use the turbine to drive a generator providing power to motors geared to the drive wheels.

The gas turbine locomotive, still in the talking stage, would use the force created by expansion of buming gases to drive a turbine, from which the motive power is obtained. Recent research in jet propulsion (BW-Nov.4'44,p17), which uses the same principle of expanding gases but applies the force directly through a jet instead of to a turbine, is expected to help solve engineering problems arising from high operating temperatures of such devices.



T was not by accident that the Boeing B-29 Superfortress acquired its extraordinary range—its stability and speed in high altitude performance—its stamina to meet the strain and shocks of battle. The performance of the B-29 stems from this—the plans were right.

This principle is often demonstrated in business history. Insurance brokerage is a case in point.

The plan on which our brokerage activities were started in 1845 was very simple—to identify ourselves with the interests of the property

owner at every step of the way, and represent him in dealing with the insurance companies.

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It was an uphill fight. Business operations and business insurance were comparatively simple, and it was not always easy to demonstrate the need for the broker's service.

But the plan was right. As commerce and industry expanded, business insurance requirements became more diverse and complicated, and presently both business executives and insurance companies began to recognize the usefulness of this unbiased intermediary—technically trained in a complex field.

This year Johnson & Higgins becomes the first insurance brokerage organization in America to reach the 100-year mark. One prin-

ciple has guided our operations throughout the past century; it will not be changed in the years to come. We work solely in our clients' interests; we have no axe to grind, but yours.

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• The Turbo-Electric Job—The na coal-carrying roads sponsoring construction of the turbo-electric locomoth are the Baltimore & Ohio, Chesapeak & Ohio, Illinois Central, Louisville & Nashville, New York Central, Norfol & Western, Pennsylvania, Reading, an Virginian.

To be built by General Electric with a Babcock & Wilcox water-tube boile this locomotive will operate at a pressure of possibly 600 lb. per square inches as compared with the 200 lb. to 300 h used in most steam locomotives, and it expected to develop 5,400 hp. Another year of engineering and construction will be required.

• Under Coal Sponsorship—Still in a formative stage is the research project sponsored by six coal-originating road and three coal producers: Baltimore & Ohio, Chesapeake & Ohio, Louisville & Nashville, New York Central, Norfolk & Western, Pennsylvania, Island Credit Coal Co., M. A. Hanna Co., and Sinclair Coal Co., in cooperation with Bituminous Coal Research.

While no decision has been announced, particular interest was directed toward the gas turbine at an early meeting of this group. One problem her will be to perfect a method for burning powdered coal instead of oil or a petroleum derivative normally used in gas turbines. This involves, among other things, elimination of ash. The gas turbine locomotive, while holding high promise, is generally regarded as several years away in its practical application.

• G. E. Develops Plant—General Motors' Electro-Motive Division, dominating the diesel road locomotive field, is presently concerned with developing plant capacity to handle hoped-for postwar business.

Fairbanks Morse developed a compact, lightweight, opposed-piston diese engine in the late 30's specifically for locomotive use. The first six of these in 1939 went into diesel-electric units for the Southern Ry.

The Navy discovered Fairbanks' opposed-piston diesel engine before further deliveries could be made to railroads, took the entire output for submarine propulsion and similarly demanding jobs. About a year ago the
Navy released a very few of these engines for the company to use in a new
locomotive department.

• 6,000-Hp. Power Unit—A road locomotive, a three-car unit totaling 6,000 hp.—ultimate destination unannounced—is being built with 2,000-hp. Fairbanks diesel engines by General Electric.

Besides the kinds of locomotives it

BUSINESS WEEK . Mar. 31, 1945

Tool "Pit" Speeds Transfer

The knotty problem of how to get government-owned machine tools from plants where they are no longer required to jobs where they are vitally needed seems well on the way to solution under a plan now in operation in Wash-

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• The plan has been labeled the "machine-tool trading pit." Under it surplus tools are reported by field representatives of the Army, Navy, Maritime Commission, Defense Plant Corp., and War Production Board to a central office in Washington. Services needing the tools then "bid" for them on the floor of the "pit." Chief difference from commercial pits is that "sales" are on the basis of need, not price.

Meetings of the pit were inau-gurated on Jan. 10. Through Mar. 8, a total of 4,463 transfers have been authorized. The time required for transferring idle tools to urgent war jobs has been reduced from weeks or months to a matter

of days or hours.

· It is likely that the pit, with modifications, will be adapted to disposal of surplus machine tools after the war.

has already built or has in process, Fairbanks lists two other types: a 2,000-hp. transfer switcher, and a 1,600-hp.

branch-line power unit.

One major worry for the diesel builders is the problem of developing a new device for transmitting diesel power directly to the driving wheels, replacing the expensive electrical equipment now used. The diesel engine represents oughly one-fifth of the design, material, and labor costs in the locomotive; fourfifths are required to make the engine power available to the rails through electric generators and motors. Successful development of a device eliminating the electrical equipment, it is estimated, would halve the present \$500,000 cost of the largest type diesel locomotive.

• Torque Converter-Since G.M. has developed a successful torque converter which transmits driving power in the much lower horsepower engines used in buses and tanks, Electro-Motive is considered to be in a good position to make such a device a reality for diesel locomotives. How soon is an open ques-

Another interesting possibility for betterment of railroad motive power is the use of mercury vapor instead of steam. General Electric has built two station-



BACK in 1911, Taft-Peirce produced the original Lougheed motor. Then, later on, Taft-Peirce tooled the motors which flew Lindbergh to France, Byrd to the poles . . . and many other famous names and planes to new records for speed and endurance.

Today, Taft-Peirce service to the Aviation Industry encompasses not only tooling and development, but also the manufacture of special production machines . . . contract service in manufacturing parts or complete motors . . . and a line of standardized Air Service Equipment which includes propeller protractors, balancing stands, checking plates, reaming and boring equipment, standard and special gages. There is a publication describing each of these services; you may have any or all of them for the asking. Write to The Taft-Peirce Manufacturing Company, Woonsocket, Rhode Island.

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"SoundScriber makes authorized telephone recordings on the wafer-thin, permanent Sound-Scriber discs. We simply file these discs and later, if an executive wants to refer to what was said, he listens to it on his desk recorder, or has typed transcripts made. Memos, interview recordings, are handled the same way.

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ary power units of this type, one at Kearny, N. J., for Public Service Co. of New Jersey, one in the G.E. plant at Schenectady, N. Y.

• What's Ahead—One thing appears certain: Out of all these projects, and others yet unannounced, is sure to come marked improvement in railroad motive power. In the mounting battle of coal versus oil, the railroad industry, shippers, and the public will benefit.

Roadable Plane?

Stout researchers test a small aircraft, with pusher prop, on which wing does the work of rudders, ailerons, and elevators.

Something new in small aircraft has made its appearance. Completion of 100 hours of successful test flying with a controllable wing which eliminates all ailerons, rudders, and elevators was revealed by the Stout Research Division of Consolidated Vultee Aircraft Corp., Detroit.

The plane is also unusual in that it is moved by a pusher propeller located in the rear of the fuselage. While pusher props date back to the Wright brothers, virtually the only other one planned for private postwar fliers is on the recently unveiled Republican amphibian.

• Wing Banks as a Unit—The new Spratt wing, named after its developer, engineer George Spratt, tilts and banks as a complete unit, somewhat after the manner of a tight-rope walker's balancing umbrella. Orthodox control surfaces of the ordinary ship are thereby made unnecessary. The wing is attached to two universal joints at the ends of pair of side-by-side pivot bars extending upward from the cabin.

A forward push of the control stit tilts the leading edge of the wing down ward, reducing the angle of attack as causing the plane to glide. Pulling the stick produces climb. When the stick is swung to the right or left the win banks and turns slightly, turning the ship correspondingly.

Two advantages are claimed for the type of wing. Economy is said to be achieved by elimination of cable on trols and their fixtures; and this may be a safety feature as well. Learning the fixed fixed because of the unified control in the stock, which is essentially the same as the one is conventional two-control aircraft but does away with the need for rudde pedals.

• Cab Ends in Fixed Fin—The cab of the controllable wing prototype if fairly standard, except that it ends at the rear in a fixed fin and mounts of four wheels rather than three, arranged somewhat like an auto.

This similarity to a passenger car makes it apparent that the laboraton is thinking of the Spratt ship as a possible solution for the "roadable plane" idea which William B. Stout has been developing for several years. This type of aircraft would drive like a car on the road, and would mount its detachable wing at the airport for flying between cities.

 More Testing Planned—Laboratory officials want to do more testing before they put their chips on the Spratt design as their roadable plane entry. They admit, though, that the success of the



With a controllable wing doing the work of ailerons, rudders, and elevators of orthodox planes, the unorthodox four-wheeled Stout Skycar might provide Consolidated Vultee with an answer to tomorrow's sky and road travel.

NORTON CUT-OFF WHEELS in action

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CUTTING-OFF by abrasive wheels is the modern way of speeding up operations and lowering cutting-off costs. Norton provides complete cut-off wheel service—resinoid, rubber and shellac bonds; Alundum, Crystolon and diamond abrasives.

Because Norton engineers have a variety of bonds and types of abrasives to work with they can give unprejudiced assistance on all types of cutting-off and slotting jobs—metallic or non-metallic materials by dry, wet or submerged methods.

NORTON COMPANY . Worcester 6, Mass.

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NORTON ABRASIVES



PAY ROLL CULTIVATION

How can mass buying power for our industrial products be developed in the coming postwar years without the factory pay rolls people need in order to buy?

The situation might be likened to a bone-dry desert. Start to irrigate and the desert blooms.

Industrial markets can be created in backward sections of our country in exactly the same way that orchards and cornfields can be created in deserts by irrigation.

If well-established manufacturers of consumer goods put branch plants in poor market sections then-

New pay rolls would be created there; young men would find "opportunity" at home; there would be fewer congested areas and housing shortages.

-AND ABOVE ALL ELSE, WE WOULD BE CREAT-ING NEW POSTWAR MARKETS.

For over 25 years Trundle Engineers have been accumulating experience in the making of business surveys, market studies and management analyses which qualify them to offer valuable assistance in decentralizing industrial operations.

Geo. A. Grundle



THE TRUNDLE ENGINEERING COMPANY

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ship and its versatile wing in test fiving may mean that their previous effort in that direction have been outmoded

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At the same time, they point out that several years of engineering developments opment may be necessary to prove the wing sufficiently to apply it to private craft. But they are pleased by test pilot belief that the wing is function ally sound.

The controllable wing is feasible only for small aircraft in its present state because it depends on the pilot strength for its movement. In a larger ship, power drives would be necessary

PACKAGE GROUP FORMED

The development of complex was time shipping problems and the need for exchanging information are the major reasons behind formation of the new industrial Packaging Engineers Assn. of America.

The roll includes 200 active members (packing officials), 150 associate members (chiefly packaging materials sales agents), and 50 corporation members. The first local unit was to be formed last week in St. Louis. R. F. Weber, supervisor of packing and loading for International Harvester Co., Chicago, is national president.

Packaging engineers are front-office men who have taken over on a higher plane jobs that formerly were done by shipping clerks, warehouse foremen, and other back-room help. Their work became important in getting war materials to fighting fronts with minimum breakage or spoilage. Private industry may find it profitable to keep them as new packings and coatings develop in postwar commerce. Industry expects to ship farther, faster, and to more varied climates.

AIRWAY RADIO SHIFT

The Civil Aeronautics Administration is going ahead, in order to be ready when equipment becomes available, with its plan to shift the federal airways radio range system from present lowmedium frequency to static-free very high frequency.

Since existing transcontinental routs generally conform to Great Circle courses, little deviation from present routes is expected when the new equipment is installed. CAA feels that the importance of Great Circle routes is not as great as it might appear to be, except on extremely long flights. Flights on such courses can be accomplished, however, through existing facilities.

Late spring or early summer is expected to see the beginning of the change-over, starting on the New York-Chicago airway.

BUSINESS WEEK . Mar. 31, 1945

EW PRODUCTS

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instruction to be known as Lindsay ruc-Lok. It is based on a patented ethod of "snap-assembly" which is id to require "no bolts, screws, rivets, welds." It is intended to compleent rather than supersede the original Lindsay Structure" that began to go to truck and trailer bodies, portable buses, and other products five years o (BW-Mar.3'40,p45). Like the original design, the new one

akes use of three basic groups of parts

YOUR BUSINESS depends on its records Will they keep? They will, if you keep them on cotton fibre paper made specifically for record keeping— Weston paper

The makers of WESTON paper have devoted their entire skill, experience, research, manufacturing and testing resources for several generations to the one purpose of creating a complete range of papers worthy of the responsibility for carrying and protecting those business records that are worth keeping.

As you value your records take the simple precaution to place them on paper made specially for the job - WESTON paper. Your supplier will recommend the particular kind and grade of Weston paper best fitted for each record keeping purpose.



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Is your Watchman on the job and ready to handle any emergency? You'll never know unless you have the evidence of a tamper-proof DETEX Watchclock System! DETEX

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"Challenging is the word for this book . . . Thoroughly readable, it raises most of the basic problems of the perplexed and perplexing new world that confronts us . . it is all said with admirable clarity and felicity of expression. The book is recommended reading for business men."

—N. Y. Times Book Review

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-framing, sheets, and fittings-all "accurately die-formed by mass production methods in a wide variety of sizes." Unlike the original, which requires a wrench for the tightening of hollowhead set screws in its assembly, the parts of the newcomer "snap together by hand.'

Special fittings "connect the framing and hold it together while the flanged edges of the sheets are snapped into die-rolled frame channels. As the edges of the sheets snap into place, they lock the framing and sheets permanently into position. . . . Corner caps and decorative molding, which also snap easily and permanently into place, give the com-pleted Struc-Lok unit an attractive, machine-finished appearance."

The construction is now available with sheets of 26- and 24-gage steel or of 61ST aluminum alloy in 0.020-in. and 0.030-in. thicknesses. Sheets of perforated or expanded metal may be used. Doors, louvers, and framing for the support of shelves, motors, and other equipment can be incorporated. Field of the construction is expected to range from the housing of light machinery and electronic instruments to supplying the basic structures of refrigerators, kitchen cabinets, furnaces, radiator covers, or storage bins.

Cloth Spreader

Just a little over a year ago the Cutting Room Appliances Corp., 45 W. 25th St., New York 10, brought out a turntable attachment for its automatic cloth spreader that permitted the laying of multiple plies of napped or patterned fabrics on the cutting table with the nap or pattern running uniformly in a single direction (BW-Jan. 15'44,p75). Now it is bringing out a new model of its basic CRA Automatic Cloth Spreading Machine with a number of improvements gleaned in the manufacture of millions of uniforms and other military products based on textiles.

One of the "major developments" is said to be a "highly machined, ballbearing pilot unit on the front of the spreader which tends to ease the tension during the actual laying of cloth," to eliminate the "danger of bias distortion, one of the bugbears of hand spreading," and to permit "faster operation of the machine." Other develop-ments include a redesigned "catcher" which holds the end of the cloth and "gives a cleaner, more accurate fold at the ends, a firmer grip, and maintains uniform tension across the entire width of the fabric and in every ply of the lay." The forthcoming model will be available with or without the turntable attachment.

THINGS TO COME

Specifications of a radically new 2-cyl. gasoline engine that has been designed to function virtually without vibration at speeds up f 11,000 r.p.m. will not be revealed by its designer until a recently completed pilot model has been put through a series of comprehensive tests. That it will prob ably be too small for any large automotive vehicle can be inferred from its extremely high speed.

If, as has been hinted, the prime mover can be manufactured in a variety of sizes, it will almost undoubtedly find its vibration-free way into applications ranging from motorcycles and outboard motorboats to farm refrig. erators and washing machines to auxiliary power units for operating hydraulic systems and electric power plants of postwar planes.

- If the home craftsman (or factory maintenance man for that matter) cannot wait until after the war for hammers, saws, screwdrivers, and other hand tools that will be readily findable in the dark, he can paint the handles of his old ones with phosphorescent paints now available in almost any art or hardware store. But if he can be patient, new peacetime editions of the same tools will come equipped with plastic handles into which glowing phosphors have been permanently impregnated.
- · Automotive engineers are wondering how much sales appeal might be added to their postwar designs by automatic tire inflation as now employed with marked success on the Army's amphibious "duck." Military censorship has just passed the statement that "Each duck is equipped with a compressor and tank, which supplies needed air to the tires through a sealed ball-bearing device attached to each wheel. When the tires are under water, the driver can inflate or deflate them. As the truck hits the sand, or a hard road, air pressure can be changed for better traction or speed. All this can be done without a change in pace. . . . If one of the six tires is pierced by a stray bullet, full air pressure can be applied to it so that the tire can hold up until the duck reaches a place where a change can be made."

If You Want to SELL MORE GET YOUR COSTS DOWN



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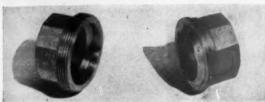
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How one manufacturer saved over 50% in machine time

It is not a very complicated job to finish either part of this cast malleable iron pipe union. Each requires six tools—six separate machine operations. All six are done, at one time, on a four-spindle Acme-Gridley Chucking Machine—remarkably fast. Acme-Gridleys are made for 4, 6 or 8 spindle operations for either bar or chucking work, in a wide range of sizes.

Good merchandisers have always known it—lower prices with sustained high quality broaden markets, because they make it possible for more people to buy.

And the more people buy, the lower production costs go.

That is the reason why sales managers and their salesmen are today interested in Acme-Gridley Automatics.

These machines turn out precision metal parts faster than they have ever been produced before. And because they save *time*, Acme-Gridleys reduce costs.

It's time now to take a good look at the sales value of automatic production machines, in preparation for the sales volume we shall need to keep America's expanded manufacturing plants busy enough to provide more jobs and make profits.



ACME-GRIDLEY
BAR and CHUCKING AUTOMATICS
maintain accuracy at the
highest spindle speeds
and fastest feeds modern
cutting tools can withstand.

THE NATIONAL ACME COMPANY

170 EAST 131st STREET . CLEVELAND 8, OHIO

Stock Auction

Alien Property Custodian orders General Aniline to sell Winthrop Chemical shares, plans to keep control in U.S.

Alien Property Custodian James E. Markham hasn't announced his decision yet on the possibility of early public distribution of the all-but-complete stock control of General Aniline & Film Corp., formerly held by I. G. Farbenindustrie, the giant German chemical trust (BW-Jul.8'44,p54).

· Auction Scheduled-But Markham has just ordered General Aniline to sell at public auction on Apr. 23 its 50% interest (6,150 shares of Class B stock) in the Winthrop Chemical Co. of Delaware for not less than \$9,500,000. This will represent the biggest offering of alien-sequestered property during this war, and Wall Street is wondering if sale of General Aniline stock will fol-

Winthrop is one of the leaders in the pharmaceutical field, its operating subsidiaries handling such essential war needs as atabrine and the "sulfa" group of drugs (BW-Mar.14'42,p69).

• Sterling Owns Half-A holding com-

pany, Winthrop does not itself engage in the manufacture or sale of drugs. The remaining half of its outstanding capital stock, 6,150 shares of Class "A' mon, has long been owned by Sterling Drug, Inc.

Sterling, which was prosecuted in 1941 in an antitrust case that was concluded by the payment of fines, removal of certain officers, and issuance of an injunction prohibiting further performance of agreements with I. G. Farben, thinks well of its investment in the Winthrop. It has started the auction ball rolling already by offering \$9,500,-000 for General Aniline block of Win-

· Benefit of U. S .- Markham is charged with selling seized alien property in the interest of and for the benefit of the U. S. He is aware that after the last war the Winthrop property was sold to American citizens but that it wasn't long before the company again found its way back into I. G. Farben control.

Consequently, before authorizing the present sale of Winthrop stock Markham consulted with Attorney General Francis Biddle, whose recommendations are being carried out to make certain

that the shares will never directly or indirectly come under the control or ownership of interests unfriendly to the U. S. or other than American corporations.

The stock for sale represents an exact mathematical half of all Winthrop's outstanding shares, but it doesn't provide its owner a complete 50% control of the company. Although its other rights are equal, the "B" stock can elect only one of Winthrop's three directors; the "A" issue elects the other two.

 Agrees to Trust Plan—Sterling Drug has agreed that, if its bid is accepted, it will (1) place 50% of all outstanding shares of the Winthrop's subsidiaries in a ten-year voting trust with APC as voting trustee, and (2) also agree to court action that will prohibit any future transfer of control of Winthrop or its subsidiaries to I. G. Farben or other foreign interests.

Other bidders must first prove that they are citizens or American organizations controlled neither directly nor indirectly by alien interests and that they are not purchasing the shares in behalf of any alien enterprise. They must then agree, if their bid is accepted, to

place either 50% of the stock of w throp's subsidiaries or the shares a ally purchased in a ten-year trust of trolled by APC.

· Future Safeguards-Under the wi trust arrangement as a further safego consent of APC, as trustee, will be quired in the event that the Winds company or its business is ever to sold or reorganized. Also, the wo trust agreement prohibits voting stock controlled, except with APC proval, for the election of any dire not a citizen or one who is a citi but is controlled by noncitizens.

FRENCH RAIL BONDS RISE

Many spectacular gains have h chalked up over the past five years bonds listed on the New York St Exchange, particularly among the As sensational as any, perhaps, been the rise from only 34% of par over 88% scored since 1940 by Milwaukee Road's 5% bonds of 19 and the skyrocketing from 10 to 110 the Western Pacific 5s in the same w

(BW-Jan.13'45,p75). Followers of foreign markets, h ever, point out that the Big Board h no monopoly on bond price gains. The say that traders elsewhere have enjoy just as good speculative opportunit For proof, they point to the 1940



JOB-SHARING PLAN FOR MANAGEMENT MEN

Top executives and a management consultant of Minneapolis Knitting Wood go over details of its new plan for rotating the presidency among three vi presidents. Under this system, designed to distribute responsibility and keep all three in close touch with operations, the tenure of the president is a year; after that his job goes to the next vice-president in line. Every three ye the cycle repeats. The three, with their consultant who worked out the sche and who sits on the firm's policy planning committee, are (left to right): H. Wolf, head of Chicago's Wolf Management Engineering Co.; A. B. Sha the current president; E. L. Thomas, and T. E. Kendall, the future president

Electronics and Industrial Control

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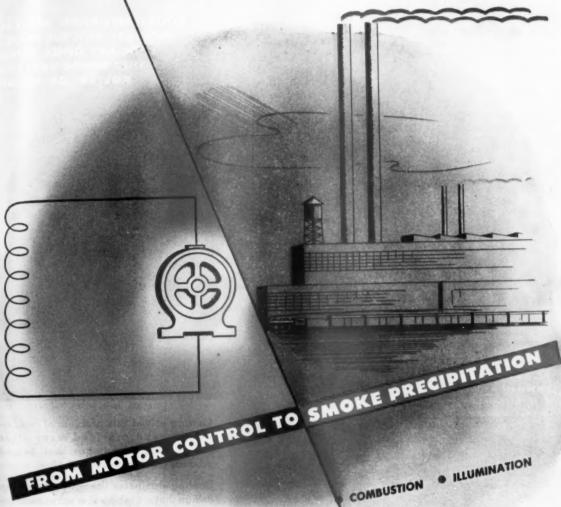
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Already electronic industrial controls change AC to DC control motor speed regardless of load changes remove dust, smoke and fumes from air and gases turn lights off and on, open and close doors, automatically control current and timing for all types of welding and accomplish a multitude of other control tasks.

Development of secret war equipment at Raytheon has opened up new applications by the score which can be perfected only when time for further development is available and secrecy no longer necessary.

If you have a specific industrial problem, which might be solved by electronic control, state the problem clearly in a letter addressed to Raytheon Manufacturing Co., Lincoln Bldg., Dept. IC, 60 East 42nd Street, New York 17, and your problem will be carefully analyzed by Raytheon Engineers who have pioneered these new developments. Their answer will be factual, and to the point, limited only by wartime censorship.

Tune in Raytheon's "Meet your Navy" Saturday night on the entire Blue Network. See local paper for time and station.

COMBUSTION ILLUMINATION

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Devoted to research and manufacture of Electronic Tubes and Complete Electronic Apparatus and Systems.



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Contributed Puriou Co.

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don Stock Exchange performance some French pound sterling railway ds, the Midi R.R. 4s, Nord Rail-6s, and the Paris-Orleans R.R.

When France fell in the spring of and interest payments stopped uptly, all three of these issues (which, effect, are guaranteed by the French asury) promptly went into a tail-From prewar levels of slightly e par for the Nord 6s, and around of par in the case of the two 4% s, they soon fell to prices of only of face value.

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When the defeatism causing this mping subsided, the bonds began to be gradually upwards, and this upd has shown considerable accelerasince the successful invasion of ce last June. The Nord 6s are now again selling at around 103% of about their prewar level and over times their 1940 market valuation. Midi and Paris-Orleans issues, also, again being traded at prewar price is of around 90% of face value.

surance Tie-Up

Local agencies to battle larger share of policies on los by joining forces with nks in instalment buying.

ocal insurance agents will make a ing bid for a bigger share of auto-ble fire, theft, and collision insure in the expected upsurge of instal-nt automobile buying after the war. an Catches On-In 1941, approxitely two-thirds of all such auto innce was written by subsidiaries of e automobile finance companies or insurance companies under contract the finance concerns. Now, local rance salesmen, as well as some of larger insurance companies which finance-company tie-ups, are planwide use of a bank financing plan cars to recapture some of the busi-

he bank finance plan has been quietly but successfully since 1935 the Industrial National Bank, Chi-It has been adopted by other ks, which have not pushed it quite so orously

mk Finances Deal-The method was to many insurance men last fall, ever, when Robert B. Umberger, cutive vice-president of the Chicago k, outlined its workings before the tional Assn. of Insurance Agents. ce then it has been widely advod in the insurance trade as the ge with which the local agent can

Two Ways to Solve Your Product Marking Problem





Right now you're up to your ears in war production. But you probably are still thinking about a new product to be made when peace comes. You're also probably thinking about marketing that product . . . how to trademark it, package it or how to get your story across at the point of sale, among other things.

That's where Dennison comes in. Whatever your marking problem, remember there's more than a century of specialized experience at your beck and call here in Framingham. So when the time comes, put your problems up to



We'll be glad to help you plan today the special tags or labels that can be manufactured tomorrow. Present production at Dennison is given over to war work, but development work with the leaders of American industry still goes on. Evidences of past performances are given in an interesting booklet on product marking and identification. Get the coupon that will bring yours to you in the mail today.

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Please send	me with	nout o	bliga-
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Property Facts Are Basic

The starting point for sound solution of problems of Income Taxation, Reconversion, Accounting, Insurance and Finance is an accurate knowledge and record of Property Facts.

The AMERICAN APPRAISAL

Company

VALUATIONS . PROPERTY RECORDS
DEPRECIATION STUDIES

pry his way back into a firm position in automobile insurance.

The bank, on request of the prospective buyer or an insurance agent, will approve the credit of a good personal-loan risk. The buyer then goes shopping for the car of his choice. The bank buys the conditional sales contract from the car dealer, pays the insurance premium, and collects monthly instalments.

• Mutual Profits—The bank's finance charge is the same for an old or new car—\$5 on \$100—or about the same as finance companies charge for new-car financing. But finance company charges are frequently 7% or 8% on used cars.

The bank gets no cut on the insurance commission. Insurance salesmen, in return for its help, send prospective car buyers and borrowers to the bank.

The plan is considered profitable by both the insurance men and the bankers involved.

• For Rural Areas-Greatest success for the plan is expected in smaller communities, although the Industrial National has done well with it in the Chicago area.

This bank's car loans totaled \$7,000,000 in 1941, nearly one-third of its total business. Between 1936 and 1941, the bank's car loans produced insurance premiums totaling \$1,000,000 on \$20,000,000 of car financing.

Resurgent R.R.

Southern System affor case study in what war train and effective management of do to a road's finances.

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Junior bonds of the Southern R
way System were selling earlier
month on Wall Street at 120% of
—the same 6½s which could be bon
in 1938 for 28¢ on the dollar.

Southern's preferred stock, which down to \$8.50 in 1938, found but at \$77, while common shares, which had a 1938 low of \$5.50, were sell for \$41.75.

Behind these market facts was story of what wartime transportation quirements, plus effective manageme had done to one of the nation's old and most important railroads.

• A Varied History—The vicissitudes the depressed 1930's were not the encountered by the Southern in evolution from the parent Richmond Danville R.R., organized nearly a cury ago. Acquisition of the pres 7,800-mile rail network (which exterinto every state south of the Ohio a Potomac rivers and east of the Missippi with the single exception of W Virginia) has necessitated a multiplic of corporate maneuvers. Mergers ale have involved more than 100 separ railroad companies.

Among the roads drawn into Sout em's empire was the old South Caroli R.R., promoted in 1833, which for time enjoyed the distinction of beithe world's longest railway. It was the road, too, which claimed the distinction of having the first locomotive that we wholly of American manufacture, the "Best Friend of Charleston."

Bankruptcy, as well as merger, ha figured in Southern's story. In fact, it present Southern Railway Co. actual owes its existence to the 1894 receive ship reorganization of the Richmond West Point Ry. & Warehouse Co. at the many roads which that old holdin company owned or controlled.

• The Trying Thirties—Rarely, how

ever, has Southern ever had to lithrough so many years so fraught wifinancial dangers as in the decade staing with 1930. Nevertheless, few veters systems have been able to prove the inherent strength as conclusively Southern has since 1938.

Southern's "depression period," a like that of most railroads, was decernible long before the 1930's. The road's peak of the 1920's was reached as early as in 1926. Annual revenues before the 1929, when many systems were bost



Model 1437—1/4" capacity (weight 3 lbs.) • Model 125—1/4" capacity (weight 8 lbs.)
MallDrills pack extra punch and power for production drilling and maintenance work. They are light in weight, compact in design, dynamically balanced and cool running. Ruggedly constructed with steel alloy gears and self-lubricated bearings. The extra long brushes are easily replaced without dismantling the drill. Commutator is easily and quickly serviced. Available for 110-volt A.C. D.C. or 220-volt A.C. D.C.

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of new all-time operating highs, were under 1926 levels, and net income 22% less. By 1932, revenues had ived 53% under those of 1926 and 926's \$23,600,000 net had been relaced by an \$11,200,000 deficit. Workgrapital also had plunged from \$36,000 to \$4,846,000, a sum equal to all three months or so of fixed charge spinements.

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Painful Comeback—With respect to senues and earnings, 1932 was Southn's nadir. Subsequent traffic rose but only. Deferment of maintenance and aipment replacement programs to ut cash began to affect operating efficiecy. In the next five years, as a relit, fixed charges were earned fully in 1936 and 1937. By the end of 37, working capital had been whittled and to \$1,865,000.

Early in 1932 Southern had to touch e Reconstruction Finance Corp. for 57,500,000 loan. It had to borrow alost as much later in the same year to eet interest charges and equipment ust maturities, and \$5,000,000 more 1026

Despite almost \$20,000,000 of RFC ans, the close of 1937 found the road eed with some \$12,000,000 of 1938 attrities and still without enough cash the till to handle the debt alone.

Noris Gets the Job—In the midst of its crisis, Southern's directors put a ew man at the throttle. Ernest E. Norsbecame president in October, 1937. Norris, born in Hoopestown, Ill., arted to railroad in 1898 as a 16-yeardemployee of the Chicago & Eastern linois. But he was no stranger to outhern's family. He joined that system 1902, became president only after thing it as car service agent, trainmast, divisional superintendent, general uperintendent, assistant to the president, operating vice-president.

By the fall of 1939, however, many

By the fall of 1939, however, many nestors, seriously doubting the road's bility to solve its 1938 maturity probans, had started to dump their Southmar, securities. It was in March, \$38, that the preferred skidded to \$50 a share, compared with a 1937 igh of \$60.50, and the 6½% junior ands sold for only 28¢ on the dollar ough the year before they had comanded a 10% premium above par.

Another Loan Arranged—Norris, how-

r, was able to arrange another loan to ay off his 1938 maturities. By the end 1938, in fact, Southern had actually anaged to start paying off its RFC ebt, which had finally totaled \$31,00,000. War earnings permitted retement of the RFC debt in three years. Fiscal problems were not the only nes that Norris had to solve. The shorter of equipment, which had been noteable even in 1929, was plaguing the



Rollers Roll -

AND THERE'S SPEED WITH SAFETY IN RAILROADING

If today a streamliner flashes its passengers to their destinations in luxurious comfort, in entire safety, in almost unbelievably short time—and if amazingly long trains, pulled by Diesel electric locomotives, whisk across the continent on speeded-up schedules—it is, more often than not, because roller bearings are in the journal boxes. Thousands of passenger cars as well as passenger and freight locomotives are Hyatt Roller Bearing equipped.

Not only in the transportation field, but throughout industry, agriculture and in our weapons of war as well, rollers roll on millions of shafts and gears where Hyatt Roller Bearings are carrying the load. Hyatt Bearings Division, General Motors Corporation, Harrison, N. J.

Make Victory Complete - Buy More War Bonds

HYATT ROLLER BEARINGS

Six months ago ... -it couldn't have happened!



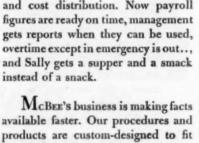
Bill in Sally's eyes is a ringer for Clark Gable. Her soldier hero with the Purple Heart had a thirty-day furlough, met Sally on his first Monday night home. By the end of the week, Bill and Sally were swinging on their own private star . . . together every night.

Six months ago-it couldn't have happened to Sally . . . because the cost department where she works kept her busy overtime the first three nights of every week. With help short, reports long, her company simply couldn't get current cost figures out in the normal working day.

But one of the executives called in

a McBee man to survey the situation. Then came Keysort for time keeping and cost distribution. Now payroll overtime except in emergency is out..,

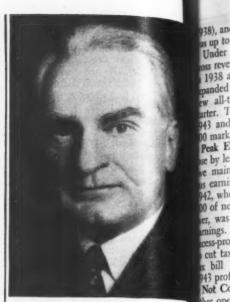
your individual problems . . . can be quickly understood and easily used by ordinary office personnel ... save time, work and worry. If your daily reports lag-call a McBee man today!





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As president of Southern Ry., Emes E. Norris has switched the road from financial doldrums onto the main lin of debt reduction and solvency.

road. By 1938, equipment and join facility rents were absorbing as much 4.6% of all revenues against only 2.39 a decade before.

Over the last five years, Norris la ordered some \$50,000,000 of new equip ment. In 1943, despite a gross 21 time as large and the need to hire many tan cars, equipment hire costs were but \$1, 608,000 compared with \$3,500,000

 Wartime Tonnage—Without this ner equipment, the road would never have been able to handle its war traffic. I 1943, on a tonnage basis, Southern haulage of mine products (mainly coal its most important freight) was running 70% ahead of 1938; agricultural shipments were up 113%; and traffic in forest products and manufacture goods had expanded well over 130%

More than 50% of the larger milita camps and stations established with the country are reached directly or in directly by the Southern; consequently its passenger traffic has also skyrocketed Passenger miles by 1943 had jumped above the 2,600,000,000-level as against 413,000,000 just five years before.

· A Repair Program-To supplement Southern's new equipment purchases Norris started a substantial equipment repair program, which has since ab sorbed many millions of dollars of reenues. However, rolling stock and loo motives for some time now have been in the best shape in history. By 1943 the average distance run by locomotive had risen to 44,242 mi. (from 33,179 ii

> BUSINESS WEEK . Mar. 31, 196 USINES

38), and the average freight train haul up to 608 tons (from 433).

Under war conditions, Southern's ns revenues, which were \$89,000.000 1938 and \$99,000,000 in 1939, had panded to \$205,000,000 in 1942, a w all-time high. This was just a nter. They rose to \$246,000,000 in 43 and were around the \$261,000,-00 mark last year.

Peak Earnings in 1942-Net income by leaps and bounds despite expene maintenance programs. All previs earnings records were shattered in 942, when the road reported \$33,400,-00 of net after all charges. That, hown, was Southern's peak year in war mings. Since then there have been no cess-profits tax exemption carryovers ent taxes. A 93% rise in the federal bill to around \$56,000,000 held

943 profits to \$23,500,000.

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Not Complaining-Higher wages and ther operating costs have also taken a ice out of earnings. Last year net ropped off to \$22,250,000. Southern, owever, isn't complaining. Profits in 944 still about equaled those of the 926 prewar record and represented mings of more than \$37 on its \$5 referred plus about \$15 on its common. In 1942, Southern resumed preferred ividends following a ten-year lapse. fter an eleven-year drought it also paid 2 to common stockholders in 1942, \$2 ain in 1943, and early this year placed e shares on a \$3 annual basis. The and hasn't been pampering its stock-olders. Once it had retired the RFC war-swollen earnings comptly diverted to retiring debt via e open market purchase route. How It Was Done-The junior de-

elopment and general mortgage bonds ne in 1956 were chosen as the best bet this connection, due to the size of hat mortgage, its relatively near maunity, the 4%, 6%, and 61% coupon tes involved, and the bonds' low mar-

et price. Such purchases have since been heavy. urrent estimates indicate that funded ebt, which in 1938 (including RFC ans and equipment issues) totaled \$290,000,000, now stands at ound \$240,000,000. Yearly fixed harges have likewise been cut to about 14,200,000 from \$16,550,000 in 1938 nd the \$17,455,000 peak reported back

Looking Ahead-Further debt reducon is anticipated. Despite the huge penditures to put its house in order recent years, Southern was still able o report cash resources of \$105,000,000 ad \$41,892,000 of working capital at the 1944 year end. How Southern will perform when war

no longer stimulating its traffic reains to be seen. Wall Street, however,



CLAYTON MOTO-MIRROR DYNAMOMETERS have increased gasoline mileage, greatly reduced road delays, improved maintenance standards and saved critical man-hours for Baltimore Transit Company and other bus and truck fleet operators.

The MOTO-MIRROR measures the power output of automobiles under actual load conditions. It makes performance testing-with engineering accuracy - easy and practical for all service shops. Experience has proved there is no better way to inspect, check or diagnose mechanical troubles than to measure performance under actual road conditions.

MOTO-MIRROR serves as an inspector, for regular checkups that detect inefficiency and prevent breakdowns . . . as a trouble-shooter, to correct power losses . . . and as a checker to test repaired vehicles. As the operator "drives" the vehicle through the full range of road speeds and loads, right in the repair shop, the MOTO-MIRROR instantly and accurately compares the output horsepower against acceptable performance.

After two years of experience, Baltimore Transit reports an increase of 1/2 mile per gallon of fuel, as well as important savings in maintenance parts and labor costs.

IF IT'S OK ON MOTO-MIRROR IT'S OK ON THE ROAD





MONEY FOR TOMORROW

Whatever else the end of the war may bring to Business and Industry it is sure to mean sweeping changes in corporate operation. In some instances, these changes may include total reconversion or extensive reorganization, in others preparation for the production and marketing of new products.

In any case, Peace is likely to call for new financing and the services of an experienced and able underwriting

organization.

Ever since 1888, the firm of Hornblower & Weeks has been serving American enterprise: Our Underwriting Department is ready to continue to serve. We invite you to inquire of a Partner at the nearest Hornblower & Weeks office. Your inquiry will be held in confidence and involves no obligation.

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thinks the job Norris has done will stand up in the postwar period, and recently Big Board market participants evidently

were concurring.
Norris, himself, is bullish over the postwar rail outlook. He thinks the rails will face keen competition for traffic. but he doesn't expect any losses that will "bring disaster" to the industry. Instead, he warns, "In your postwar planning, don't sell the railroads short."

Tax on Big Firms

Michigan may increase its corporation privilege levy for large companies, take less from thousands of small concerns.

Michigan is considering a plan to extract a larger share of the state's corporation tax revenues from big companies, less from small business.

· Would Remove Limit-The proposal, now being studied by a state senate taxation committee, would lower the present corporation privilege fee from \$2.50 to \$1.75 per \$1,000 of paid-in capitalization and surplus. But it would remove the present ceiling of \$50,000 which any company pays as a maximum

in this tax category

The result would be that companies like General Motors Corp., Ford Motor Co., and others which now pay \$50,000 would have their bills raised up close to seven figures in some instances. But 14,534 smaller concerns which paid \$6,104,880 last year-an average of only \$420 apiece—would have their bills reduced to \$4,273,316, an average of

 Eighteen Pay Maximum—Despite this reduction, last year's tax total would have climbed to \$8,061,472, instead of \$7,004,880. The big companies would have paid a total of \$3,788,156, rather than a flat levy of \$900,000 collected from the 18 firms which pay the maxi-

mum \$50,000 apiece.

The reason only 18 concerns pay the maximum is that companies incorporated in other states pay a privilege tax in Michigan based on that proportion of their property and business done in the state. Lifting of the ceiling would probably intensify the perennial arguments over exactly what proportions should determine the tax.

• Who Would Pay-The 18 firms whose tax bill would be surely hiked by lifting of the ceiling are: Briggs Mfg. Co., Burroughs Adding Machine Co., Chrysler Corp., Consumers Power Co., Detroit Edison Co., Dow Chemical Co., Fisher Co., Ford Motor Co., General Motors Corp., Great Lakes Steel Corp.,

Stock Market Omens?

The stock market traders, al. ready a bit edgy because of "peace jitters" and fears of possible hikes in margins and taxes aimed at discouraging too rapid rises in stock prices, received no soothing news early this week.

• Instead, the New York Stock Exchange announced steps to obtain a more accurate picture of the amount of credit being used to finance the security and commodity trading by clients of exchange

members.

Beginning at once, members must report at the end of each month the amount of credit being extended customers on cor. porate securities, commodities, and government obligations; the size of customers' free credit balances; and the amount of cash on hand or banked.

• This information will be consolidated and made public monthly, and some traders are now wondering if the new procedure is a forerunner of further changes in margin rules.

Washington reports indicate that William H. Davis, new Director of the Office of Economic Stabilization, may soon back up earlier official demands (BW-Mar.3'45,p74) that Congress discourage "speculative gains" by installing some new and more costly taxes on profits from transactions in securities and real estate.

J. L. Hudson Co., Hudson Motor Ca Co., S. S. Kresge Co., Michigan Con-solidated Gas Co., Packard Motor Ca Co., Parke, Davis & Co., Standard Oil Co. of Indiana, and Wyandotte Chemicals Corp.

WAR REBATES PILING UP

Refunds (or agreements to refund amounting to over \$5,800,000,000 have been the result of the first three years of operation of the government's war contract renegotiation program, according to the War Contracts Price Adjustment Board. In addition, the Treasury has saved a huge sum, impossible to estmate, from the fact that contractors tend to avoid excess profits subject be renegotiation by repricing their prod-ucts downward when making contracts (BW-Dec.16'44,p15).

The refunds tabulated so far reflect for the most part, contracts completed in 1942 and 1943. Renegotiation on 1944 business has just begun.

PLOT YOUR COURSE



while the weather's fair!

Seldom in the course of a business cycle can industry secure new funds through almost equal choice among bonds, preferred stocks and common stocks. Today, a strong demand exists in all three fields of securities.

Many important companies have taken advantage of this favoring circumstance to put themselves in sound financial position for the years ahead.

Any company which can now foresee the early need of new financing, might well meet such requirements during this period. This firm has long been identified with the financial growth of many of the country's larger corporations.

> We invite your inquiry with a view to planning the arrangement of proper financing.

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MARKETING

Chains Dig in for Brand War

Safeway overture to nonadvertised foods is interpreted as chain store's proclamation of independence aimed at nationally known labels. Postwar conflict is one of buying vs. selling.

To a chain store, a quick turnover is the single vital fact of existence, for only a quick turn of stock can build sales volume, and sheer volume—at a short profit—is the very essence of mass distribution. Time was when that meant that the food chains put a heavy merchandising emphasis, often featuring a cut price, on the fast-moving nationally advertised brands, for which demand was already built.

• Second Look—But with the chains' rise to power, times have changed. That change is pointed up by the recent announcement of Safeway Stores, Inc., second largest food chain in the country, to the general effect that it would be glad to consider stocking the goods of any food manufacturer, no matter how obscure, provided his products meet established standards.

After a month of contemplating the implications of that seemingly innocuous invitation, many in the food trade have begun to realize that the Safeway statement of policy may be more significant for what it didn't say than for what it did. They think that the Grocery Manufacturers of America, dominated by the producers of nationally advertised brands, may yet have cause to eat the words of praise with which G. M. A. hailed the Safeway policy as a break for not only the small manufacturer but also the big one who brings out a new line of goods. G. M. A., they feel, either missed the point of the Safeway pronouncement or ignored it. • Declaration of Independence-True, in these days when merchandise shortages have depleted all retail stocks, it is prudent for Safeway or any other dis-

tributor to seek new sources of supply.

But when the announcement is considered against the background of the chain stores' increasingly cavalier attitude toward nationally known labels and the aggressive development of their own brands in the last prewar years—particularly Safeway's activity—the new policy does take on stature as a kind of declaration of independence, the chain store's independence of the national advertiser.

• Battle for Power-No marketing man doubts that when the war ends and

the brakes come off merchandising, the Battle of the Brands (Report to Executives; BW-Oct.12'40,p27) will be resumed with a new ferocity.

Actually, what's ahead in the post-

Actually, what's ahead in the postwar years isn't just a fight between the private brand and the nationally advertised product on chain store shelves. It's a fight between two opposing sets of distribution practices—a struggle for power between buying and selling, between mass distributors who figure on building consumer demand and sales volume by guaranteeing lower prices, quality for quality, than are available elsewhere, and national advertisers, who believe in creating a strong consumer demand by sales pressure, on the premise that the increased demand will make possible a lower price.

HE

• On Commodity Basis—What the chains—corporate and voluntary—want is to put all of their buying and selling operations as nearly as possible on a straight commodity basis; they want to buy and sell canned goods, dry groceries, and meat much as they buy and sell fresh produce.

That policy means buying by specification—a set of standards that will give them the qualities they order, regardless of brand names.

It means contracting for goods in large volume, preferably the entire output of a plant, so that the supplier can produce efficiently on a year-round basis





ROBOT REACH SAVER

Four men who share one telephone are cobuilders of a neat gadget that eliminates an obvious inconvenience of wartime phone shortages. Occupying adjacent desks in the Delco Products Division of General Motors at Dayton, Ohio, the four (above) have a motor-driven arm (left) which delivers the instrument at the push of a button. The device, made of scrap, is controlled through its 10-ft. circle by a switch at each desk. And it even has a "hold" circuit through which one man can put in his bid for the telephone while another is using it.

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HE SCIENCE BEHILD THE SCIENCE OF ELECTRONICS

DAWN of a New Power for Industry...

Of man's achievements in opening new sources of power, perhaps the greatest—certainly the most spectacular—is in electronics. The science of electronics is opening new avenues of productiveness and efficiency to industry. Here man probes almost to the source of energy itself to harness and release new forces. Through the medium of the Electron Vacuum tube, you can put this new power to work. "Eimac" have been exclusively engaged in the development, perfection and production of Electron Vacuum tubes for more than a decade. During this time they have become first choice of leading electronic equipment manufacturers the world over. When selecting equipment for your application, look first for the name Eimac on the tubes.

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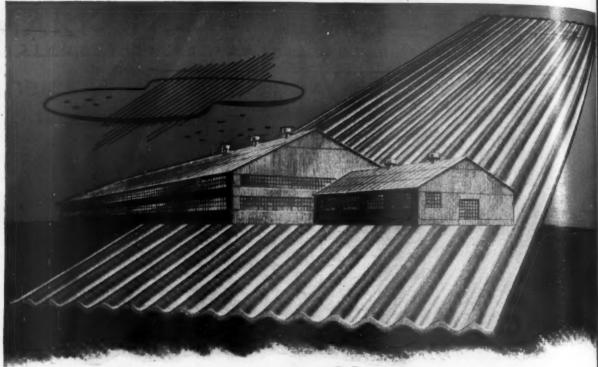
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PROTECTION GOES CLEAR THROUGH! No coatings. Structural and protective material are one.



WON'T BURN. It's naturally fireproof. Won't rot, rust or corrode. Ordinary industrial fumes or salt air won't phase it.



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pansion Joint * Asbestos Wallboard and Sheathing * Carrugated Asbestos Roofing and Siding * Miami-Carey Bathroom Cabinets and Accessoria

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BUSINE

labor Paper May Expand

The C.I.O. News, a tabloid-size weekly with a circulation of 400.-000 in 17 editions, all printed in Washington, D. C., may appear augment its present subscription sales. on news stands this summer to

Trial news stand sales will be made in a single city to test the magazine's appeal. A two-color cover, additional features, and a new type-dress are planned.

Advertising rates range from 60¢ to \$1.25 an agate line, depending on the number of editions carrying the ad. The servicemen's edition carries no advertising.

a guaranteed purchase contract, thus inating the manufacturing and sellcosts which are incident to producfor an uncertain market.

It means developing new, integrated urces of supply, and gearing them into e chain's whole operation.

It means shaving every possible cost transportation and delivery, buying m a source of supply as close as posle to the point of consumption (creng a new source if necessary), and mbining deliveries to achieve a maxium utilization of warehousing and ansport facilities.

Tried by Safeway-Five years ago BW-Oct.26'40,p52), Safeway took a ng step in that direction by insisting at no supplier deliver his own goods rect to any of its 2,300 outlets but at all goods be delivered direct to afeway warehouses for combined deveries to the individual stores.

Then, Safeway sought increased volne discounts from the manufacturers hich would reflect their savings on the ultiple deliveries, and when some supiers, notably Coca-Cola, refused, the hain discontinued handling their

Aim for Quantity Discounts-Clearly, he whole postwar pattern of chain ore operation is designed to take full dvantage of the provision in the Robinon Patman law which approves quan-ity discounts that simply reflect "savgs in the cost of manufacture, sale, or elivery" and which exempts such diferentials from the law's general ban on different prices for different customers.

In that scheme of things, price and quality are the only important criteria; and names are considered to be of strictly secondary importance. Apparently, the chains have satisfied themelves that supermarket operation minimizes the importance of the brand

This man can help you gear your plant for post-war

The Baker Material Handling Engineer is at your service to help you meet postwar demands for lower production costs, increased plant capacity and improved working conditions. His intimate knowledge of inside transportation problems—in plant, warehouse, shipping or receiving platforms—enables him to evaluate your complete handling set-up and recommend the proper equipment to achieve objectives listed below, for present or postwar needs.



CREASED PLANT CAPACITY

Baker trucks can help you multiply the value of plant floor space by ciering material two or three high (or higher), by storing bulky dies or other material in yards or remote areas, by keeping materials moving and machines running for most efficient production.



GREATER MANPOWER EFFICIENCY

Handling materials faster, handling bigger loads, using one man (or woman) with a power truck to do the work of 6 or 8 with hand trucks, getting more out of skilled labor by cutting idle machine time—these are a few of the ways in which Baker Trucks can improve manpower efficiency.



LOWER PRODUCTION COSTS

Since handling of material is not strictly a production operation, it offers one of the best possibilities for savings in overhead cost. Rent costs, machine and labor costs, loading (and unloading) costs, spoilage costs, accident costs—all can be cut by proper use of Baker Trucks.



FASTER DELIVERIES

Streamlining production and movement of material with Baker Trucks can move up delivery dates, shipping and teceiving in "unit packages" on skids or pallets means less damage in transit. Faster loading and unloading and better warehouse handling are also important factors.



IMPROVED PLANT SAFETY

Material Handling accidents account for approximately 5 million working days lost annually—about ½ of the total. Eliminating the handling of heavy objects, overloading hand trucks, improper stacking, and overhead dangers by the use of baker Trucks, can go far toward reducing this waste.



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> In Canada: Railway and Power Engineering Corporation, Ltd.

Plant and production managers, traffic man-agers, superintendents, purchasing agents and any others concerned with material han-dling will find the new Baker Catalog No. 52 a valuable reference.



name; that while the consumer was apt to buy a product by brand name when she shopped at the traditional grocery store, price comparisons are more persuasive when she waits on herself in the supermarket. (Safeway, the pioneer in supermarket operation, now runs all its stores on supermarket selfservice basis, and other chains are moving in that direction as rapidly as wartime restrictions on materials permit.)

• No Divorce Yet-To the extent that private brands and A-B-C grades on the label will build patronage, the chains will, of course, intensify their use of these devices, but they are only two weapons in the chain store arsenal.

As for the national brands, the chains, with all their bravado, are not yet ready to seek a divorce ending the marriage of convenience which they contracted years ago with these products. For that matter, neither is the manufacturer of the national brands. For both of them, it's still a case of not being able to live with each other and not being able to live without each other.

· No Doubt About Goal-But the pattern of the chain stores' aspiration is clear. They want to sit in the driver's

seat all alone.

In building up their case, the chains frequently cite the fact that their earnings, in relation to sales volume, run like this: Safeway, 1.5%; American Stores, 2.1%; Great Atlantic & Pacific Tea Co., 2.6%; Kroger, 2.8%. Then they compare ratio of earnings to sales by representative producers of nationally advertised food brands, such as: General Mills, 5.9%; California Packing (Del Monte), 7.4%; Standard Brands, 12.1%; and General Foods, 13.4%.

The chains, adopting a holier-than-thou attitude, interpret the comparison as demonstrating that manufacturers of the big branded lines use advertising to create a special identity for their products which will lift them out of price competition and justify levels that will fatten company profits. And they say that, as long as that "philosophy of high-pressure selling" prevails, the nationally advertised brand will find a smaller and smaller sale in the nation's chain stores, until that day when the division in distribution in America is

· Goal: Self-Sufficiency-When that day comes-if it ever does-there will be, on the one hand, the chain store with the suppliers revolving in its orbit, and on the other, the producer of nationally advertised goods, selling through the independent wholesaler and retailer.

For the chains are aiming to establish themselves as self-sufficient, closed corporations, shutting the door on all suppliers who won't operate strictly on their terms. That's the struggle for power-to see whether the buyer or the seller shall prevail-which will make American distribution history for years after the war.

Meaty Argument

New England retail groun claims packer cuts small store off delivery list. Answer is the old customers come first.

A first-rate quarrel was being and last week in New England between the Massachusetts Retail Grocers & Provision Dealers Assn. and Armour & C The association accused the nation second-largest packer of having ruth lessly cut off the meat supplies of man small dealers in that area, threatening their commercial lives and affecting for supplies of thousands of families.

Armour, on the defensive, assert that the policy to which the retaile object is the company's effort to di

tribute meat fairly.

· Company's Policy-Armour state publicly that it "is making every effor to continue servicing its customers the limit of possibilities" and that a purchase large enough to carry the one head expense involved without loss n ceives the company's best attention When orders are too small to cam their cost, according to Armour, they are likewise too small to affect the dealers opportunity to continue in business or to affect the convenience of the consuming public.

Like every other seller of scarce merchandise who attempts to distribute fairly to his long-established customen what little products he now has for sale, Armour is plagued with phones trying to get on its list. The company has within recent weeks had applications for old-customer consideration from stores which the records show have bought nothing from Armour since they took a stick of sausage in 1942.

• What Is a Customer?-Key to the disagreement in Massachusetts is Armour's definition of a customer as one who now, as in the past, buys at least \$15 a week. With deliveries only 30% to 40% of normal meat supply, some borderline dealers are thus pushed below the \$15 line. Obviously, to none of these outlets was Armour's meat ever an important item until it became hard

Wistfully as they wish that they might take care of everybody, the packer's branch managers waste no tears on the folks who get squeezed by this rule under this definition of a regular cus-

• Some Cut Off by ODT-One other class of customer is, however, the source of genuine dismay to the management. A relatively small number of dealers, including some really substantial prewar

Department Stores Eye Frozen Foods

Department stores rarely have found large-scale food departments profitable. But in frozen foods they may have an exception (BW-Dec. 30'44,p62). This is the thinking behind Frozen Foods Institute, recently organized by Marshall Field & Co. (Chicago), R. H. Macy & Co. (New York City), J. L. Hudson Co. (Detroit), and Allied Stores Corp., which operates a chain of 60 department stores.

• Carrier Affiliation-Fifth member is Frozen Food Products, Inc., in which Carrier Corp. is interested. (Carrier recently established an experimental frozen foods store for its employees and for owners of home freezers in Syracuse, N. Y.) Otherwise membership will be limited to department stores, each holding the exclusive franchise in its city, and each contributing financial support in proportion to its total sales volume. Members concede that eventually they may sell private brands of

frozen foods processed by methods perfected at the institute.

One of the institute's major projects will be freezing cooked foods; its members visualize offering the public frozen foods originally cooked in their own tearooms. Other problems to be studied include packaging, storage, labeling (cooking directions), display cabinets, and freez-

ing processes.

• Cornell to Participate-Laboratories will be at Syracuse, which is in the country's second largest center of frozen-food production (largest is the Pacific Northwest). The in-stitute will cooperate with Cornell University, long a leader in frozenfood research, and will rely on Carrier Corp. for technical skill in refrigeration.

Heading the institute's staff of about a dozen technicians is Gerald A. Fitzgerald, who was formerly on the technical staff of General Foods

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one of your most important business assets is a smile on the face of the man who works for you. This is always true. It is particularly true today. Smiles indicate high employee morale. This, in turn, means higher production. It makes it easier to hold good men. It makes it easier to hire good men.

Where do such smiles come from?

A man smiles at his work because he likes his job. Because he likes the people he works with and for. Because he likes the pay he gets. But principally he smiles because he is free from worry about the future.

The first three factors are matters for you and your personnel department. The fourth is where we can help you.

A way to eliminate some of an employee's worries and to add to his feeling of security is to set up a sound pension plan or group annuity. Conditions at present are most favorable to the installation of such a plan.

When you consider any plan of this nature, consider, too, how you can benefit from the broad experience, conservative judgment, and progressive viewpoint of the John Hancock Company.

This company has had 80 years of experience in keeping promises through all of life's uncertainties. During these years, we have encountered prosperity, depression, and virtually every manner of unexpected events.

We will be glad to help you set up a sensible, long-range pension plan or group annuity for your business. Naturally, we will be happy to work in conjunction with the trust officer of your bank, if you wish. The John Hancock agent in your locality can supply you with complete details.

Or write to the Home Office of this company.



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OF BOSTON, MASSACHUSETTS

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In his line—with the responsibility for life, limb and property weighing heavily on his shoulders—there's only one way to play it ... and that's to play it safe!

With Twin Disc, playing it safe...making sure that the product is designed and built right, properly applied and serviced...has been a cardinal point of company policy for more than 26 years. Year after year, the wisdom of this policy has been demonstrated by the ever-increasing list of powered industrial equipment in which Twin Disc Clutches and Hydraulic Drives provide the connecting link between driving and driven units.

If you build or operate machinery involving a problem of power transmission and control...play safe by asking Twin Disc engineers for their recommendations. Whether the solution of your problem lies in friction clutches or hydraulic drives, it's all the same to them because Twin Disc builds both. Twin Disc Clutch Company, Racine, Wisconsin (Hydraulic Division,



customers, are in remote locations who Office of Defense Transportation mage restrictions forced the companion of its truck routes. Those few we cannot be reached by rail or high haulers have had to be discontinued everybody's sorrow.

Now It's Eggs

Lower production, higher consumption at home and abroad blamed for scarcity. Up grading hits New York City.

The egg situation throughout the nation this Easter season is thorough scrambled, and so badly in New Yor City that the Dept. of Justice steppe in to investigate.

• Receipts Below Demand—From Boton to San Francisco the egg trade as trying to meet the heavy consumer to mand for Easter and the Passover had days, and to cache some of the flut spring egg production as protection against summer and fall shortages. Normally spring production, which come to a peak in April and May, is on the upswing in March and eggs are plent ful. But this year egg receipts at primary markets are far short of demand

War Food Administration reports to the week ended Mar. 17 indicate that receipts at primary markets in the Con Belt increased 20.48% over the previous week, but still were 32.29% below marketings one year ago; on the Pacific Coast receipts dropped 1.96% under the previous week, and were 23.16% below 1944; at eastern assembling plants there was an increase of 0.52% over the earlier week, but a decrease of 36.34% from the previous year.

Officially the Bureau of Agricultural Economics estimated that egg production would be off about 10% compared with last year.

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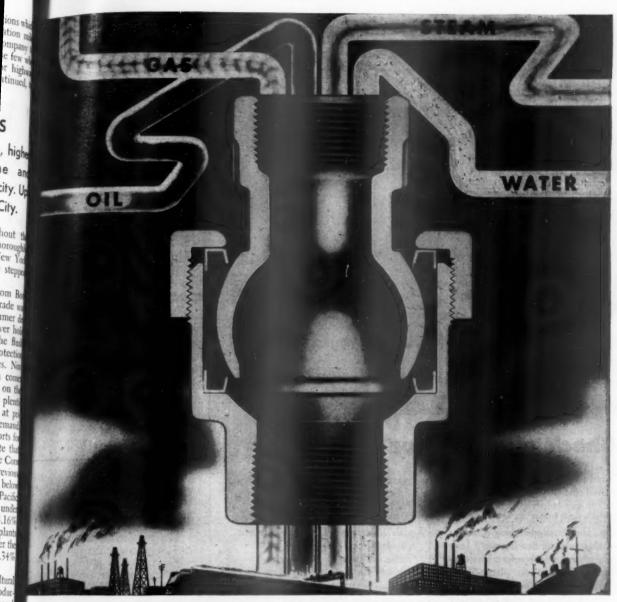
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• Consumption Soars—WFA had a number of explanations for the falling off in production. The agency itself is buying heavily on the open market in competition with military and civilian purchasers. Military procurement during the past months has also been heavy, and unless there is an abrupt end of the war in Europe, it will probably continue large.

In 1944 egg supplies glutted the market and prices were relatively low. To avoid the same poor market in 1945, farmers raised one-fifth less chickens than in 1943 (BW-Mar.24'45,p24). Add to this a further trouble—the high price of poultry has tempted farmers to sell off their laying flocks.

While egg production has dropped



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he destructive action of vibration and shock can't hurt fluidonveying pipes protected by Barco Flexible Joints. By means of esponsive movement, Barco compensates for every contraction and spansion—preventing leaks and breaks. Its range of designs covers very flexible joint problem in transportation and industry. Today, s in the past 30 years, Barco's experience and progressive skill tand ready to assist you. Barco Manufacturing Co., Not Inc., 800 Winnemac Avenue, Chicago 40, Illinois.

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Not just a swivel joint...but a com-bination of a swivel and ball joint with rotary motion and responsive move-ment through every

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Shock absorber for tired feet...

Tired feet mean tired workers...impaired efficiency.

You can help your workers fight fatigue with Flintkote Mastic Flooring. The shock-absorbing qualities of this resilient flooring are a long step toward more comfortable working conditions in your plant.

Mastic flooring made with Flintkote materials has other important characteristics, too. It's rugged and tough and quiets traffic. It's easy to apply on new floors or for resurfacing. Simple to maintain. It is waterproof, and will not dust. Heals itself of minor scars and rutting.

Extensive research and the most modern manufacturing methods make every Flintkote product give you many long years of care-free economical service.

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field men...our entire organization ... are all interested in your problems. Working together, we can probably find an answer that will prove economical and efficient. Offices in the principal cities. THE FLINTKOTE

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Farm egg production in January below year-ago levels for the time in five years-declines of 7% the number of laying hens, and 1% in eggs laid per hen, account for the total 8% drop. February was down, by 11%, and present in cations are that the seasonal spr peak will fall short of the record by more than 10%. off, the reduction in civilian supplies meat, and the continued high level national income, have combined to se egg consumption to record levels. W estimates that egg consumption in 19 was 349 per person, 2% above 19 and 51 eggs above the prewar (19 1939) average. For 1945 egg consum tion will probably reach between and 360 per capita.

• Prices Increase—In the trade, talk an egg shortage was forcing pri

FEWER EGGS Production

5.5

higher, and at both consumer wholesale levels eggs were selling at a ceiling—or above. For example, in N York City, where white eggs norma sell at a premium over brown Boston it is the other way) the dema is such that both brown and white a selling in the large chain stores at supermarkets at OPA ceilings, rangi from 43¢ per doz. on small grade fresh eggs in cartons to 48¢ on lan grade A.

Duck eggs, traditional among Inis Americans at this time of year, scarce because so many of the bin have been killed to obtain the high me prices. Such duck eggs as are available sell for as much as 90¢ per doz. Goo eggs, which because of their size are demand for tinting and window d

ENTKOT

Building Materials & Industrial Products



This helmeted miner with his rock drill "gun" is producing copper to make cartridges and shells— bombs and torpedoes—copper for the electrical parts on planes and tanks—for the innumerable bronze bearings and brass valves used on ships

In copper mines-yes, and in iron mines and coal mines, too—elaborate piping systems are necessary to regulate the flow of air to pneumatic hammers and drills-to control the flow of water for washing away cuttings and pumping out waste—to furnish steam for producing power.

And piping systems, of course, mean valves, fittings and pipe whether they be in a mine, a central station, a steel mill, an oil refinery or a

Furnishing the valves, the fittings, the pipeevery essential for every piping system, is Crane's job. Many users of piping have found that by standardizing on Crane they are assured of matched piping—with every part working in harmony—a simplified stocking problem—better service, because of Crane's nation-wide distribution, and above all, high quality equipment assuring maximum life.

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VALVES • FITTINGS • PIPE UMBING · HEATING · PUMPS

WHOLESALERS SERVING ALL INDUSTRIAL AREAS

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WHIZ Floor Primer and Cleaner restores floors and other surfaces without scrubbing . . . WHIZ Self-Polishing Floor Wax provides a waterproof, non-skid, lustrous finish! Use this WHIZ combination for better looking floors that resist the wear and tear of heavy traffic.

WHIZ Floor Primer and Cleaner strips off the old wax ... lifts out embedded dirt and grime ... seals pores... acts as a filler and binder for the wax finish.

WHIZ Self-Polishing Floor Wax gives floors that famous WHIZ lustre without rubbing or buffing. It has superior non-skid qualities and stands frequent damp moppings with a mild solution of soap and water. Order from your WHIZ distributor. Industrial Division, R. M. Hollingshead Corp., Camden, N. J.; Toronto, Canada.



plays, are being sold at 70¢ each. Biggest victims of the shortage are the buyers who hope to store eggs now for sale later in the year.

 Upgrading Charged—In New York City, jobbers, supported by the local egg inspectors' union, threatened to take a "holiday" on egg sales unless the OPA increased ceiling prices. The job-bers claimed they were losing around \$1.50 a case as a result of upgrading by prior purchasers (collectors of eggs at the farms for resale to jobbers).

Specifically, prior purchasers have taken advantage of the huge demand to sell jobbers the same grades at the higher consumer prices charged for grades A, B, and C. In normal trade practice, wholesale grade is figured mainly on the buyers' own knowledge of eggs, while consumer grading goes a step beyond this to determine exactly by candling whether an egg is grade A, B, or C. This so-called upgrading, although admitted by OPA as a violation existing generally throughout the nation, appears to be particularly bad in New York City.

The threatened strike, however, only got the Butter & Egg Merchants Assn., Inc., into more trouble, as the Anti-Trust Division of the Dept. of Justice, taking note of the several holidays threatened by New York City food dealers, called for a federal grand jury inves-tigation to determine if the proposed holiday were a violation of the Sherman

antitrust act.

• OPA Considers Relief-OPA gave "sympathetic" consideration to five pro-posals submitted by the New York mer-

Chief request was that OPA put into effect at once the price increases which, according to the seasonal schedule, would not be permitted until June 28.

The trade group also wanted to ban the sale of eggs to first receivers, jobbers, chain stores, or other heavy buyers on a consumer-grade basis; and asked that producers or shippers be prohibited from selling consumer grades to retailers at a distance of more than 50 miles; that weight requirements be changed; and that the WFA institute a set-aside order for military procurement eggs.

CANNED SUNSHINE

The Texas Citrus & Vegetable Growers & Shippers Assn. forgot one thing when it decided to ship a case of citrus fruit free to every war prisoner liberated from the Japanese-the California embargo on Texas fruit.

California's governor refused to make an exception. Consequently, the returning P.W.'s will get canned Texas citrus fruit juice instead of the fresh fruit. Several hundred cases have already been shipped to the West Coast.



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TIRES TAKE IT

Streaking down the stretch on India apolis Speedway at 135 m.p.h., at ing car puts wartime synthetic ti to one of their most grueling te For the 500-mile high-speed dem stration staged by Firestone Tire Rubber Co. four stock synthetics w mounted on the racer which of pleted the grind, at an average spe of 100.34 m.p.h. The punishing n made without tire failure, put equivalent of 50,000 miles of ordina driving on the "shoes," proved the synthetics will stand up under he

WHAT FARMERS WILL BUY

Another survey, this one focusing farmers in the Pacific Northwest, been made to find out what people w buy with their war savings.

Automobiles, radios, and househo equipment lead the postwar buy plans of 1,380 dirt farmers checked the Pacific Northwest Farm Trio, p lishers of the Oregon Farmer, Was ington Farmer, and Idaho Farmer mag zines. The survey was divided equal among the three states, where fan crops in 1944 had a value in excess a billion dollars.

The magazines found that 37.6% the farmers plan to buy new cars, 34.81 want radios, 30.1% hope to install bat tubs or showers. Other percentage wheel-type tractors 24.3%, track-type

tors 8.5%, trucks 21.2%, electric gerators 27.4%, washing machines 1%, water heaters 21.7%, ranges 1%, waffle irons 14.2%, oil heating aces 7.6%, steam or hot water furs 2%, frozen food lockers 28.9%, are water systems 14.7%, kitchen s 17.2%.

RBER PRICE LAW REVISED

law regulating minimum barber es again has been placed on the on law books. Unconstitutional fea-s of an old bill, ruled out by the e Supreme Court (BW-Jan.20'45, , are believed to be overcome in new.

Inder the old law, it was held by court, the state barber board unfully delegated authority in perting 70% of barbers in a county to prices. The new law provides that of the barbers may petition the nd to investigate prices and take on it deems necessary

The bill was presented by the barbers n "to guarantee minimum prices a point that will enable shops to intain sanitary service and decent ndards." Main opposition has been m independent owners who wish to haircuts and shaves below the ng rate.

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As predicted last fall (BW-Sep.16 ,p78), Butler Bros. this week annced plans to establish a voluntary in of home-furnishings stores as soon conditions permit.

The outlets will be known as Homest Stores and will be operated on same terms as Butler's Ben Franklin riety) and Federated (dry goods)

Participating retailers must purchase merchandise through Butler Bros. aless Butler cannot supply him), and ist subscribe to certain Butler services store management and merchandispractices.

AS VEGAS WANTS MOVIES

bush on a plan to bind the Nevada resort on more closely to Holly en more closely to Hollywood. The cked on more closely to Hollywood. The pole capital provides the best cusmers for Las Vegas entertainment.

Wilbur Clark, owner of the El Rancounced of the first of the pole cted on a 21-acre plot across the shway from his hotel. Plans call for 34.8 m movies a year.
The backers believe that the studio

l attract tourists after the war

93

SINESS WEEK . Mer. 31, 1945



When a steam piping system gets hot, it "grows". A big pipe will often rise inches above its position when cold. This expansion can't be crowded back into the system . it would cause destructive strains . . . the pipe must be allowed to rise.

That sounds easy. But the hangers supporting the pipe can't simply relax. As the pipe rises they must maintain the same lift,



because the pipe weighs just as much hot as it does cold.

The Grinnell Constant-Support Hanger solves this tricky problem. With the almost human sensitivity of a tireless arm, it flexes as the pipe rises and settles, yet its lift never varies.

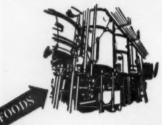
Piping puzzles like this are solved regularly by Grinnell specialists in FLUID TRANSPORT... to improve operating efficiency for industry, to provide more comfort and convenience for you. GRINNELL COMPANY, INC. Executive Offices, Providence 1, Rhode Island. Branch Offices in Principal Cities.

WHENEVER PIPING IS INVOLVED

PIPE AND TUBE FITTINGS . ENGINEERED PIPE HANGERS . AUTOMATIC SPRINGLERS AND OTHER FIRE PROTECTION SYSTEMS . PREFABRICATED PIPING . SPECIALTIES FOR HEATING AND PLUMBING, WATER WORKS, AND CHEMICAL, FOOD, PETROLEUM AND PULP AND PAPER PLANTS.



Product purity is absolutely vital to hundreds of chemical, food, phar-maceutical manufacturers where even a slight trace of dissolved metal may ruin a \$10,000 batch. That is why Pfaudler Class-Lined Process Equip-ment is specified so universally.



Pfaudler Glass-Lined Steel Equip-ment is highly resistant to acid attack (except HF) in any concentration and at high operating temperature and pressures. These units eliminate metal dissolving and can be counted upon for a greatly extended life.



Put it up to Pfaudler Engineers

Pfaudler engineers are also helping manufacturers by designing and building special glass-lined steel and alloy equipment for particular processes. Their experience is at your service now in finding the solution to your present or anticipated processing problems. Write the Pfaudler Co., Rochester 4, New York.



ENGINEERS AND FABRICATORS OF CORROSION RESISTANT PROCESS EQUIPMENT | 94

LABOR

National Service Compromised

House and Senate conferees may have achieved agree ment on indirect labor controls, but under any circumstances came so late that opponents of manpower draft won real victor

The bitter battle over national service legislation, which opened two years ago with the introduction of the Austin-Wadsworth bill (BW-Mar.13'43,p100) and which has been growing in intensity ever since, seemed at last to have passed a climax this week.

· A Compromise Measure-Eight of ten Senate and House conferees, trying to reconcile the stringent Bailey-May manpower bill which had been approved by the House and the "milk and water" Thomas bill passed by the Senate, came up with a compromise measure which they agreed to support.

What they had evolved was nation service, and no mistake, but it is al cry from what the Administration manded at the opening of this session (BW-Jan.13'45,p98). Nor did it sate the U. S. Chamber of Commerce, National Assn. of Manufacturers, C.I.O., and the A.F.L.-the four lea ing employer and labor groups which have been carrying the fight to den the Administration the authority sought over manpower.

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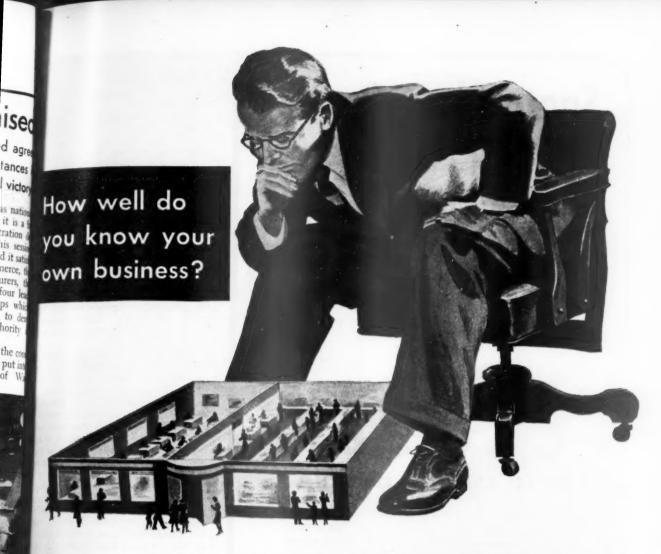
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• The Real Victory-Whether the con promise measure was ever really put int operation by the Director of W



PRISONER PRODUCTION APPROVED BY ARMY

Publication of the first picture of German war prisoners producing dry-cell batteries in Milwaukee has raised the question of whether captives may perform such war-type work under the Geneva Convention. Prisoners involved are paid volunteers who wire up and encase the cells which go into 22½-volt batteries made by the Battery Assembly Co. Suggestions that their labor might be in direct support of the U.S. war effort, hence illegal under the international agreement covering captives, has brought from the Army a terse reply that the batteries "are not necessarily" destined for overseas service. A National Guard hangar at the Billy Mitchell airport is the site of operations which are geared to employ about 1,500 men from the Wehrmacht's ranks.



Don't mistake our meaning. We don't pretend to know more about your business than you do. But it is our business to know that part of your business which is concerned with systems.

It your business requires that you handle money and keep records...it the decisions you make are based on lacts and figures...the chances are that this National lact-finding survey will save you both man-hours and money!

YOU ARE UNDER NO OBLIGATION

The size or nature of your business doesn't matter. Without obligation to you, an experienced National representative will analyze your method of inventory control; the way you handle your payroll, your accounts receivable, your distribution of sales and costs.

After his analysis, he will make detailed recommendations as to how you can strengthen any weak points in your present system. Check the National System he recommends in every possible way. Plan no further action unless you can see a definite saving in both time and money. There is no obligation.

Why not call the National representative today? His number is in the phone book. National Accounting-Bookkeeping Machines are available through priorities.

SPECIAL TO MERCHANTS

Without cost or obligation a retail specialist from National will be glad to make a survey of your system for handling store transactions and records. He can give you practical suggestions on how to get the best possible use out of the National Cash Registers you have now. Ask for this sales-proved assistance today!



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ACCOUNTING-BOOKKEEPING MACHINES

THE NATIONAL CASH REGISTER CO.



CLOSER to 16 million people!

After looking at the map, it's hardly necessary to explain why Santa Clara County is outstripping the Pacific Coast in rate of industrial growth. Located at the population center of the Pacific Coast, Santa Clara County is in the strategic position to best serve the nation's fastest growing market.

Over three million people are within two hours' driving time of Santa Clara County. More than eight million—over 50% of the entire population of the West—are reached by an overnight haul. Factory sites are still available in Santa Clara County. It will pay you to get more facts of interest to your business.

WRITE TODAY, ON YOUR BUSINESS LETTERHEAD, FOR



POST WAR PACIFIC COAST

The factual story of Santa Clara County

SAN JOSE CHAMBER OF COMMERCE DEPT. "W", SAN JOSE 23, CALIFORNIA



Mobilization & Reconversion, James Byrnes, who was empowered to end it, was of less practical consequence at the fact that the progress of the would—in the public mind at least—a such legislation seem less justified at it seemed a year ago. By staving of national service law so long, oppose of the idea had won the real victor

It was much too late in the day any government agency to try to blan the nation with rigid manpower combacked by threats of fines and jail.

The most that the Administrate could reasonably hope for is that a power control statute will thin stampede from war work to peace in The Bill and Its Aims—The corporation of the Senate, who its fate on Wednesday appeared don ful, affirms an obligation on every invidual not in the armed services "serve the nation in an activity essent to the war effort."

It empowers Byrnes (1) to condu in-plant surveys of both public a private establishments to determine h effectively labor is being utilized: to prescribe employment ceilings designated areas, activities, or places employment-fixing the maximum nu ber of workers (by age, sex, or occu tional qualifications) who may be the employed; (3) to prohibit or regula the hiring, rehiring, solicitation, or cruitment of new workers by employe and the acceptance of employment workers; (4) to prohibit individual employed in designated areas, active ties, plants, and farms deemed essent to the war effort from voluntarily les ing their jobs.

• Punishments Provided—Sharp tee for enforcement of these regulation are provided by making any violation misdemeanor, punishable "by imprison ment for not more than twelve month or by a fine not to exceed \$10,000,000.00 both." The only important string purpon Byrnes is a provision which, "the maximum degree consistent with this act and with its purposes," drects him to consult the national regional, state, and local management labor committees on such decisions.

The War Manpower Commission which has been vainly trying to guithe same ends by a system of voluntar controls, would doubtless get authors from Byrnes to handle all the field wo necessary to administer any such land.

Strong as the compromise measure appeared on paper it was in one vital particular glaringly short of Administration specifications. This central point was the keystone of the House-approve Bailey-May bill and was deleted in conference committee. That "work or jail measure would have empowered the

BUSINESS WEEK . Mar. 31, 196

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or rugged, sturdy strength, you can't beat steel. or ship anchors or fish hooks; for farm machinery or atomobiles, refrigerators or stoves. Today, there are etter steels than ever before... many of them deloped in United States Steel laboratories. After the aryou'll get these better steels in scores of peaceme products. But be sure you look for the U-S'S abel on them. It's the mark of quality steel.

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IRON & RAILROAD COMPANY · UNITED STATES STEEL EXPORT
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UNITED STATES STEEL SUPPLY COMPANY · UNIVERSAL ATLAS
CEMENT COMPANY · VIRGINIA BRIDGE COMPANY

THE LABOR ANGLE

8%

It's all but official; 8% upward is the next jump for base wages when, following V-E Day, the Little Steel formula is revised. Government planners find justifying logic for the 8% figure this way: At \$1 an hour with time-and-a-half for overtime, the employee working 48 hours now makes \$52 a week. His base rate is \$1, but his average rate is \$1.08. To keep his wages at \$52 upon a return to a 40-hour week would require a base rate increase of 30%—patently impossible. What is considered feasible, how-

What is considered feasible, however, is a pay adjustment which would fix the new base rate at the wartime average rate, i.e., an 8% hike. On the assumption that the work-week will not decline all the way to 40 hours for a protracted period after V-E Day, particularly in the mass-production industries, and that there will be a tapering off of bond purchasing through payroll deductions, labor's net take-home pay may not drop too sharply.

Airminded

The National (Railway) Mediation Board has received a petition from the catch-all District 50 of John L. Lewis' United Mine Workers asking that District 50 be certified as collective bargaining agent for all ground employees (service, maintenance, clerical) of United Air Lines. The certification will be forthcoming, and the Lewis union will be a jump ahead of the field in a manyentried labor sweepstakes which has as its prize the mass-employing postwar air transport industry.

The Lewis organization jockeyed itself into this favorable position by taking over the independent Air Transport Employees Union which has been organizing workers in air ground stations from coast to coast.

Airline employees have their labor relations governed by the Railway Labor Act, a statute enacted to cover the railroad industry and later extended to air transport. There are charges that the law does not fit air-line problems and that it is administered by a railway-minded board with little knowledge of air transport.

Convinced that it could muster more influence if it affiliated with a larger group, A.T.E.U. invited the C.I.O., the A.F.L., and the United Mine Workers to send representatives to a special convention which was called to decide the future of the organization. After the convention heard spokesmen for the three competing bodies tell what they were prepared to do to help airline employees get organized, the delegates representing ground personnel voted unanimously to recommend affiliation with the miners. A subsequent membership referendum resulted in an 8-1 vote in favor of joining Lewis.

With this beginning, District 50 is preparing to make itself the leading labor factor in the industry.

Backstop

In James F. Byrnes' desk in the Office of War Mobilization is a bill giving to the National War Labor Board statutory powers to enforce its awards. Drafted to Byrnes' order by Benjamin Cohen (of the once famous Corcoran and Cohen team) after long discussions with William H. Davis (former NWLB chairman and present head of the Office of Economic Stabilization), the projected measure has been shown to a few key senators and representatives. It will be submitted to Congress as an Administration "must" when, as, and if the Supreme Court decides the President exceeded his authority in seizing Montgomery Ward.

Test

The hearing which the Civil Service Commission will conduct on the Charles Douds case—he was removed from the directorship of the New York regional office of the National Labor Relations Board by a 2-1 vote of the board (BW—Jan.20'45,p96)—will air a serious internal feud within the agency. But it might assume an even greater importance.

Douds was a serviceman in World War I and, thus, goes before CSC covered by all the protection written into World War II's G.I. Bill of Rights. The veteran's organizations are planning to use his case to get the broadest kind of job guarantees for vets from the CSC. In so doing they will, of necessity, challenge NLRB's right to oust a war veteran and the board will have to defend its action on unexplored ground.

government to draft any 18 to 45, old male not in the armed services assign him to selected jobs.

• Other Countries Have It—This la draft feature is the core of national access in Britain, Germany, and most the other belligerent countries. We out it, the U. S. would be attempting achieve the same maximum effectives of labor placement that could be seen under a draft program, by the maindirect means of employment ceilindirect means of employment ceilindirect

The very indirection of this approat to regulation of the labor market mait certain that—given the most intensional administration possible—months were clapse before a control program by around any such law could be effects.

Significance—Even if the law we enacted and enforced, it would not after directly too many employers or were. A few of them might be order ers. A few of them might be order about and threatened with fines a jail sentences for noncompliance. It the great majority—thanks to the imment victory in Europe—would for national service a dead letter.

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Dual Employment

Prudential keeps the 109 but satisfies WMC by bringing war production on which stated can work after regular hours.

A new wrinkle in coping with Wa Manpower Commission orders to a lease less-essential employees—and on that meets with the approval of WMO—has been worked out by the Pruder tial Life Insurance Co. in its Newar (N. J.) general offices.

• Employees Protest—Recently Pruder tial was ordered by the area WMC to release 10% of its 8,000 employee there (BW—Mar.17'45,p94). Employees protested, and Prudential was reluctant about reducing further a staff already hard hit by the war.

After considerable study Prudental worked out a generally acceptable plan War production was brought into Prudential's office building, and employed are manning production jobs voluntarily of the control of the contr

ily after regular hours.

When the plan went into effect essential war firms needing employed were invited to lease space in the Prudential building. The insurance compand agreed to assist in recruiting workers of a part-time basis from among its personnel, which works only 42 hours a week.

• Paid for Both Jobs—Those who agreed will continue to receive their full pa

The Equitable

LIFE ASSURANCE SOCIETY OF THE UNITED STATES*

reports on its progress in serving human needs

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HE PURPOSE of The Equitable is to serve human needs-to enable policyholders through co-operative action to achieve security to a degree that would not be possible through individual effort alone.

The Equitable during the past year continued to grow in usefulness to the American public and to the war economy of the nation. A total of \$609,026,000 of new Equitable life insurance was purchased in 1944. This volume is a tribute to the foresight and patriotism of a large proportion of the American people, who are refraining from spending their money needlessly and instead are putting it aside for the future.

It is likewise a tribute to the work of Equitable agents in carrying the story of life insurance and its benefits to the public. Most people, even though they realize their need for the protection that life insurance provides, tend to defer its purchase and must be persuaded to do that which will mean much to their welfare and happiness.

The aggregate of Equitable protection at the yearend was \$8,897,754,000-a record.

Benefit payments to policyholders and their families averaged \$26,000 an hour throughout the past year, a total of \$230,992,000.

The increase in dividend rates on most types of policies, put into effect last year, is being continued for 1945, thus maintaining the low net cost of Equitable protection. An aggregate of \$43,801,000 is scheduled for distribution to policyholders as dividends during

The Equitable continued to grow in financial strength during 1944, assets increasing \$318,329,000, a larger gain than in any previous year. Total assets are \$3,507,983,000.

Holdings of United States Government obligations have increased to \$1,568,317,000, representing policy-

*A Mutual Company Incorporated under the Laws of New York State

holder funds directly helping to speed victory. In addition to the purchase of Government securities, The Equitable made diversified investments in corporate securities in 1944 at an average yield of 3.51%.

Life insurance is serving well in the war. It has extended and enlarged its protection of the American Family. It has helped those in distress. It has encouraged thrift and combated inflation. It has contributed greatly to the financing of the war.

In the peacetime future of our country, life insurance will be an equally dynamic factor. While continuing as a bulwark of family security, its investment funds will help industry speed reconversion and expand production, thereby providing jobs.

Life insurance investment funds have played an important role in the development of America. What life insurance has done in the past to aid the national economy, it will do on an even vaster scale and with larger inspiration in the America of tomorrow.

YOUR POLICY FREE BOOKLET -with real-life pictures and examples. Helps you arrange your own life insurance to get the greatest values. No greatest values. No obligation. Fill in coupon today and send to 393 Seventh Avenue, New York I, N. Y.



Bedlam is where you find it

Perhaps, Mr. Office Manager, you think you've found it—but plenty! all over your war-disrupted office. Surely the present-day upsets of routine, the overcrowding, the lack of equipment—these troubles make life much harder. But wait! Maybe help is on its way—in the form of—

ART METAL'S "MR. EXPEDITER, O.D."

Yes, help will come, if you send for him. He's the "Doctor of Offices" whose mission in life is to help untangle office confusions, to make things run more smoothly. Naturally, he can't now provide some of the equipment he'd recommend, but he should have some bright and helpful suggestions for you.

Call in the good Doctor. There's no charge for his services. Let him work on your problems. And ask for his illuminating book, "Office Planning." Simply call your local Art Metal branch or dealer, or write Art Metal Construction Co., Jamestown, New York.

Makers of ART METAL STEEL OFFICE EQUIPMENT POSTINDEX VISIBLE RECORDS *WABASH FILING SUPPLIES CINCINNATI BALTIMORE HARTFORD PHILADELPHIA BOSTON CLEVELAND LOS ANGELES PITTSBURGH DETROIT CHICAGO WASHINGTON **NEW YORK** amestown, New SYSTEMATIZED EQUIPMENT RECORDS FOR BUSINESS

Severance Pay Plan O.K.

Against that day when we contracts are cut back, severance pay plans voluntarily submitted by employers or by employers and unions jointly will be approved by the National War Labor Board provided proposals are within reson. NWLB made clear its position on this when it approved unanimously last week an application by American Type Founders, Inc., Elizabeth, N. J., to gram severance pay to salaried employees if it reduces personnel for peacetime production.

Just what NWLB considers a reasonable proposal is indicated by what American Type plans to pay: one week's wages to employees who have worked between six months and one year, two weeks after one year, three weeks after two years, and four week after three to five years.

The company now is producing Army and Navy ordnance materiel and is employing 5,500 persons, of whom 1,000 would be eligible for severance pay.

from Prudential, and will be paid reg lar rates by the part-time employer.

First to snap up Prudential's offer u a printing company which arranged i workers in the insurance compan printing department to help on a lar production job for the Army and Na

A radio tube manufacturer leas space to install a simple assembly in Negotiations were under way this we for a number of other projects. FYC

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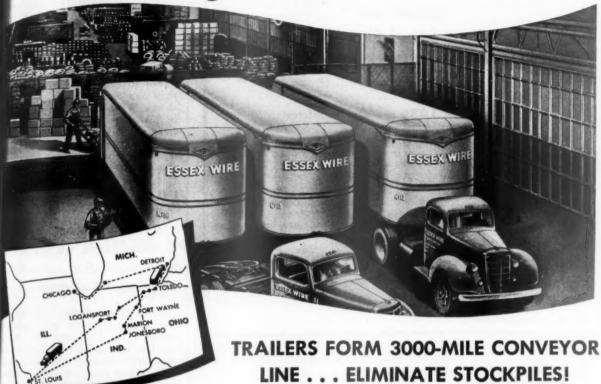
• A Matter of Man-Hours—Newal WMC office was satisfied to let he dential's plan take the place of a life personnel slash—provided the insuran company sees that its employees or tribute 38,400 man-hours of partin work each week. That is the equivalent of 800 workers—the number Prudenti was ordered to release—working thours a week in essential industries.

C.I.O. BACKS ANNUAL WAG

Eric Johnston's subcommittee of the advisory board of the Office of Wi Mobilization & Reconversion, who will conduct a study of the guarantee annual wage at President Roosevelf order, will be the major point of concentration for the C.I.O. in the month ahead. Philip Murray, C.I.O. presiden and a member of the Johnston committee, is the funnel through which labor pressure is poured.

Labor leaders refuse to acknowled

Wire for the Skyways Rides the Highways in Fruehaufs!



If YOU'VE TRAVELED the central states, you've likely seen Essex Wire Corporation Trailers on the highway, but you may not realize the job these Fruehaufs do in speeding big bombers into the air!

TRAILERS ACCELERATE PRODUCTION

Chief production of Essex Wire, in peace or wartime, is electric wire, terminals and all sorts of electrical fittings used in airplanes and automotive vehicles. The corporation's plants and their chief subcontractors are scattered over 5 states—but all are connected with a continuous Truck-Trailer "conveyor line" that totals 3000 miles.

TRAILERS WORK 2 WAYS

It's a continuous 2-way hauling operation that must maintain an exacting, precision schedule—with no interruptions. Fourteen Trailers, pulled by ten trucks, handle the job daily. No motion is lost. Truck-Trailers haul wire from Detroit to the other plants and on return trips finished products are rushed to customers on the route. The Ford Bomber Plant at Willow Run is the biggest of these today.

STOCKPILES ELIMINATED

Essex discovered the flexibility of the Fruehauf method back in 1930. Soon their Trailers demonstrated that distant production lines could be fed over the highways—when and where needed. Stockpiles were eliminated. Turn-over of finished products was stepped up. In short, straight-line transportation balanced straight-line production methods.

CHALLENGE YOUR HAULING COSTS

If you are maintaining an inter-plant flow of materials, parts and finished products, now is the time to check your hauling efficiency. Executives in more than 100 different kinds of business will tell you that in most cases Trailers do the job better and at lower cost than it could be done in any other way.

FRUEHAUF TRAILER COMPANY

World's Largest Builders of Truck-Trailers

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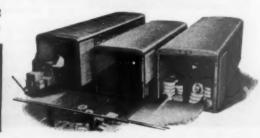
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DETROIT 32

Service in Principal Cities





This announcement appears as a matter of record only and is under no circumstances to be construed as an offering of these Bonds for sale or as a solicitation of an offer to buy any of such Bonds. The offering is made only by the Prospectus.

NEW ISSUE

\$24,000,000 Wheeling Steel Corporation

First Mortgage Sinking Fund 31/4% Bonds, Series C

Dated March 1, 1945

Due March 1, 1970

Offering price 103% and accrued interest

Copies of the Prospectus may be obtained in any State from only such dealers participating in this issue as may legally offer these Bonds under the securities laws of such State.

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Union Securities Corporation

New York, March 27, 1945.



AS FAST AS THE FIRE OF A MACHINE GUN



High-speed packaging machines make impressive savings in cost. An example of what our modern machines can do, is this AC model which makes the standard five-stick package of chewing gum, with easy-opening tape, at a speed of 600 sticks per minute.

The AC is but one of many different models of our machines which wrap the great majority of America's packaged products.

Consult us now regarding your present or postwar requirements

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PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

interest in Roosevelt's motives in calla for the study. It has been suggested the the President ordered the undertain to divert labor attention from its call paign to raise hourly rates and that was assigned to the OWMR advising group because members had complaine they were being sidetracked by OWM Director James F. Byrnes BW-Ma 24'45,p5). Such a study was unas mously recommended by the National War Labor Board in its steel wage on decision (BW-Dec.2'44,p16).

Why Roosevelt wants to launch the study now is not important to lab leaders. What is important is getting the Johnston subcommittee to build strong public support for annual vage and wind up its work by urging Congret to pass legislation which will bring guaranteed yearly pay to factory workers.

Management Shift

Hospitalization programd
Southern Pacific Co. put under
the joint control of railroad and
employees by arbitrators.

PO

The Southern Pacific Co.'s (Pacific lines), hospital system for employes, established in 1868 and one of the largest of its type in the nation, will switch from company control to operation by a joint employee-employer board May 1, 1945, under an order by an arbitration panel appointed under the federal Railway Labor Act.

• Employees Control—Since the control board will have a seven-six majority of employees, the award virtually places operation of the hospital system—consisting of a large hospital in San Francisco and smaller facilities elsewhere on S. P.'s lines—into the hands of employees who for years argued that while they paid 93% of maintenance costs they had no voice in administration of the hospitalization program.

Fifteen rail unions, representing 80.000 S. P. employees, brought demands for revision of regulations governing administration and financing of the hospitalization program. After failing to reach an agreement, the road and unions submitted the controversy to arbitration on June 30, 1944. The panel was unanimous in its decision favoring the unions.

• Injury Costs Shared—In addition to providing for a change in administrative methods, the award also requires the railroad to pay half of the cost of treating employees injured on the job. In the past the cost has been borne entirely by the hospitalization fund contributed by compulsory weekly payroll

GROUP THINKING

MAY HELP YOU

SOLVE YOUR

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For years our clients have come to us for guidance in meeting their problems. We have been told that these Round Table discussions are regarded as the most valuable feature of our service to customers.

Lately, wartime and post-war problems have caused a noteworthy increase in consultations of this sort; and they have related to one or all of today's most pressing questions: taxes, reconversion, selling out, floating a stock issue, post-war merchandising of new products, marketing and competitive strategy.

There are specialists in each of these fields, as everybody knows. But, as our customers pointed out, many of these problems are inter-related. This, they said, makes it advantageous, and even essential, to "tell their troubles" to a group of sound business men capable of bringing a diversified experience to bear on a composite solution. It then occurred to us that perhaps many other manufacturers may welcome the Heller group thinking idea these days. And so, for the duration at least, we decided to make available to all what may be called the Heller Business Clinic. This, then, is your invitation to lay your problems before the group of men who run the Heller business.

In accepting, be assured you place yourself under no obligation whatever. There will be no charge unless you specifically request us to go beyond the consultation stage. Neither will you be subject to solicitation. And you have our assurance of strictest confidence.

We extend this invitation with the full knowledge that many will come to us who today may not need money at all. And, though providing money is our business, if you don't need any, we shall be happy to charge off to good-will such service as we may render to you.

What's more, if you need money that could more advantageously be secured through regular banking channels, we shall quickly say so. Obviously, if there is need for our kind of money, we shall expect first consideration.

We do not offer this Clinic as a "cure-all." We may be unable to help you at all—except perhaps to steer you in the right direction. But we will be glad to match our time against yours for our mutual benefit.

If you want more information about us or our Clinic, we'll be glad to answer your questions by letter or phone. For a personal meeting, ask for an appointment.

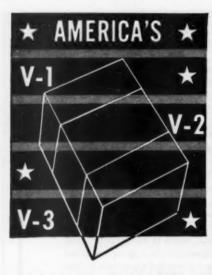
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In 1944 our volume exceeded \$2225,000,000



SECRET WEAPONS

Hats off to the Weatherproof Box Groups for developing their wartime Y-boxes: Y-1, Y-2, Y-3—overseas shipping containers for vitally needed supplies. We are proud of our part in helping shape the specifications. If you have shipping problems perhaps we can help you too.

Container Testing Laboratories, Inc. New York • Chicago • San Francisco

MARYLAND'S AMBASSADOR OF GOOD CHEER
COAST TO COAST

NATIONAL
PREMIUM
BEER
PALE, DRY, BRILLIANT
Send 10c for book of fine OLD MARYLAND RECIPES
THE NATIONAL BREWING CO. BALTIMORE, MARYLAND

deductions. The arbitration board estimated this will require payments exceeding \$100,000 annually by the carrier.

Other provisions call for issuance of annual financial statements; the opening of cost records of on-the-job injuries to employees involved; and the extension of the hospitalization plan to employees of the Oregon, California & Eastern Railroad.

• May Serve As Precedent—Assisting the unions was H. P. Melnikow, head of the National Labor Bureau (BW—Oct.28'44,p94), a private advisory organization serving unions in contractual and employer relationships.

Since the unions represented by the National Labor Bureau in the S. P. case have been protesting a number of other carrier-dominated hospitalization plans, the arbitration award assumes added significance. Precedent has been established which might lead to a general revamping of railroad hospital programs on a broad basis.

THE OLD STRIKE TIE

Employees of the Union Motor Coach Terminal in Chicago, who stopped work June 30, 1944 (BW-Jul. 8'44,p108), because the company refused to permit ticket agents to work without neckties, will have another chance to win a fight against their employer's uniform attire regulations before the hot days of 1945 set in.

The employees, 101 members of the Brotherhood of Railway & Steamship Clerks (A.F.L.), requested in the spring of 1944 that they be permitted to work

in sport shirts without ties during warm days of June, July. August, September. The company refused I mately the case was referred to the tional War Labor Board.

Recently NWLB's order a through. In effect it left the control right where it started—in collectivel gaining between employees and a pany. NWLB affirmed the right of a agement to order uniform attire for workers. But the board also stipula that differences in opinion regulating reasonableness of company regulating be submitted to regular grieval procedure, and if necessary to arbitrate

TEXTILE VOTE DEFERRED

New England cotton textile works who voted Mar. 11 to ask for a Q nally-Smith law strike vote, will de action long enough to give the Q and Economic Stabilization Direct William H. Davis time to act on a 5 an-hour minimum wage ordered contionally by the National War La Board. Southern textile workers are pected to follow suit.

Decision to ask for a strike vote a taken by New England members of Textile Workers Union of Amer (C.I.O.) when NWLB ordered by postponed the 5¢ increase in minimal wages. On Mar. 18 NWLB remove its stipulation in the interest of increase urgently needed supplies of the total textiles. It was a go-ahead sign for wage negotiations, but there still a catch to the increase: OPA metertify that prices will not be affected.

PRODUCERS' PUBLICITY

Paid newspaper ads represent efforts by the movie producers to picture themselves as innocent bystanders in the A.F.L. jurisdictional strike, over 72 set decorators, which brought creeping paralysis to Hollywood (BW -Mar.17'45,p106). But the publicity last week failed to influence the striking Conference of Studio Unions, which held producers responsible for the walkout because they had not enforced a National War Labor Board arbitrator's award. That decision vested in C.S.U. tentative jurisdiction over the decorators. The rival stagehands' union remained on the job and found support in the refusal of office workers and acting talent to join the strike, but then had trouble when some of its members balked at crossing picket lines. Each side has a

ABOUT IN THE MOTION PICTURE STUDIOS?

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O Then What's All the Striking About?

powerful ally in the A.F.L. hierarchy the strikers are backed by the carpen ters' union, the nonstriking stage hands by the teamsters' organization

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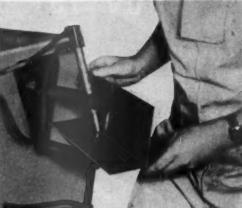
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PRESSTICO PRESSTICO SPOT WELD SEALER Assures Air and Watertight Joints

Now, thanks to the development of Presstico Spot Weld Sealer, you can quickly and easily obtain air, moisture, and waterproof seals between spot welded joints and seams.

This new sealing compound is applied to the faying surfaces of the metal before welding. It does not affect the strength of the weld, has no corrosive effect upon the metal, and retains high cohesive, adhesive, and sealing properties throughout a wide range of temperatures. It effectively prevents corrosion or rusting in the joint. Presstico Spot Weld Sealer is available in flow-gun, brush-on, and spray-on types. It has been thoroughly tested and already is being extensively used by the automobile, railroad, and refrigeration industries.

Developed by the Presstite Engineering Company, for many years specialists in the field of sealers, coatings, and adhesives, Presstico Spot Weld Sealers have a wide variety of applications throughout all industry. It will pay you to write to Presstite for full information on this, or any other industrial or commercial sealing problem.



PRESSTITE ENGINEERING COMPANY

3936 Chouteau Avenue • St. Louis 10, Missouri

WHEREVER SHAFTS MOVE, THERE'S A NATIONAL OIL SEAL TO PROTECT ITS BEARINGS



BEARINGS SEALED

SO YOUR PRODUCT WILL STAY SOLD

Tomorrow's customers will demand greater machine efficiency, economy of operation and satisfaction. Precision parts, accuracy to a ten-thousandth of an inch, Oil Seals to protect the bearings... these are a few urgent details for any selling.

The incorporation of National Oil Seals provides a potent sales point with a proven record. They insure continuous machine efficiency, trouble-free performance and long life by retaining lubricant in the bearings . . . excluding abrasive dirt. Trained engineers backed by a quarter century of experience in oil sealing offer individual help to firms believing the integrity of their product is the secret of sales success.

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NATIONAL DIL AND FLUID SEALS and Davis must O.K. the higher 'Under the new decision T.W. locals will withdraw their request a strike vote, and OPA and David be permitted to consider the Naward without an immediate threat. But T.W.U.A.'s New Enlocals left nothing to chance voted to give the union's national the right to call a strike vote if plief is not forthcoming in due time.

Workers Insure

New York City hotels hospitalization, sickness, dent, and life coverage to ployees under union contra

Since the National War Laboral ruled that free hospitalization is ance for workers did not violate ceilings, many companies have used device to keep restless employees flying the coop (BW-Mar.18"44.pt

This substitute for forbidden raises was part of the contract si last week between the Hotel Assa New York City and the New York tel Trades Council, but the agreer goes further-it adds life, sickness, accident insurance for the union n bers. The hotels will bear all costs. Part of Contract—The provisions part of the regular union contract w will expire May 31, 1946. The bin check which the hotel association to the Associated Hospital Service hospitalization coverage was \$68,4 one of the largest of its kind e written. The life-sickness-accident icy was provided by Prudential, wh got a down check for \$50,000.

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Though the union puts up no of the cost, its representatives will minister the insurance fund. The p will cost the 133 participating hot more than \$1,000,000 a year who means a payment of 3% on the earings of 25,000 employees.

• Some Hotels Missing—Some fame hotels, including the Waldorf-Astor are missing from the group whi worked out the plan. But participals are such well-known hotels as the Co modore, New Yorker, Pennsylvan McAlpin, and Vanderbilt.

So long as the present boiling uprosperity continues, the hotels of meet the insurance payments withoundue pain, but the group on the or side is wondering what will happe when the union contract comes up it renewal in lean years. All sides reconsize that once obtained, these benefit will not be surrendered by the union without a struggle.

106 BUSINESS WEEK . Mer. 31, 19



Simple facts about the mechanics of contract windups explained clearly in one booklet, "The ABC of Contract Termination"

ren the apparently complicated, time-taking ocedures involved in contract terminations in be reduced to relatively simple terms. bu'll find an easy-to-read outline of paper ork requirements and a sound method for eeting them in our new booklet offered here. The basis of this method is the use of the limeograph* duplicator. In addition to its her advantages in this application, and they e considerable, it has a unique answer to a

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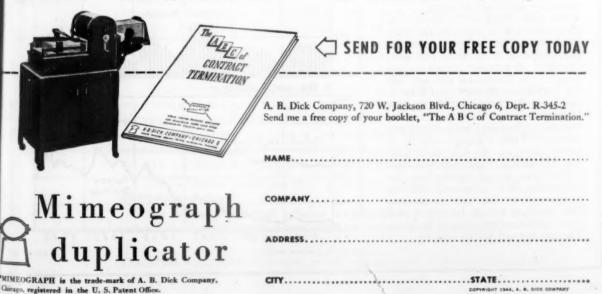
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WHAT THE LABOR BALANCE SHEET SHOWS

Figures Behind the Manpower Problem

Labor statistics show that, except in one vital series, we began 1945 just about where we began 1944 as far as manpower is concerned. Seasonal factors tend to impose a definite pattern on such series as the quit-rate and strikes in progress, but it is the up-as-far-as-we-can-go limitation that keeps the work-week and factory employment close to level.

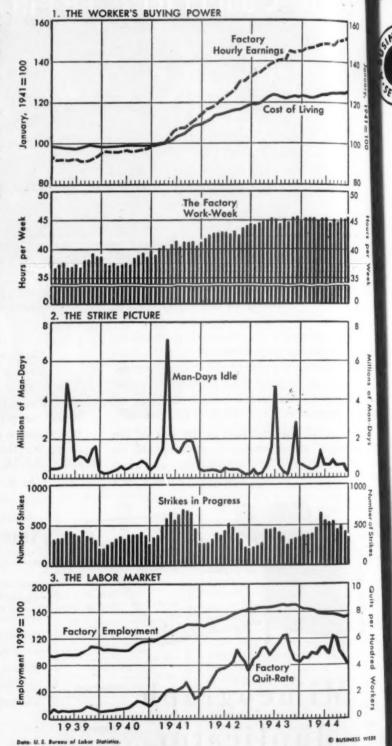
The one exception to the pattern of statistical inertia is, of course, hourly earnings in factory employment. Their surge forward is now in what may be considered its third phase. The first phase was a response to the shift of workers into the higher paying munitions industries; the second was a response to the application of the Little Steel formula throughout the economy; and the third, or present phase, finds its impetus in provisions for fringe wage adjustments (BW-Mar.17'45,p21).

• The Worker's Buying Power-At 126.0, the Bureau of Labor Statistics' official cost-of-living figure in December, 1944, was up 2.8 points from its January position. Living costs have thus risen 26% from January, 1941—base point of the Little Steel yardstick. Over the same period, hourly earnings show an increase of just twice as much.

• The Strike Picture—In terms of time lost through labor disputes, 1944 must be accounted a good year. The longrange strike pattern, however, holds no assurance for the future. Every other year is a bad one, and signs in profusion are already at hand to suggest that 1945 might be the worst strike year since we started to rearm.

The Labor Market—The factory employment curve is, currently, the major legislative problem in Washington. The Administration is convinced that nothing short of national service—as proposed in the Bailey-May bill—will man the warplants sufficiently and keep an Army in the field at full strength. Opponents of national service contend that any work-or-fight law will send output down. There is no agreement to be found, either, on the more basic question: Do we have a manpower shortage?

New labor market controls have had a depressing effect on turnover, reflected in the quit-rate (4.1 workers in every 100 quit their jobs in December), but the midwinter pattern may be deceptive. The real test will be this summer.



E WAR AND BUSINESS ABROAD

NESS WEEK CH 31, 1945 With Hitler's Rhine defenses smashed and Allied troops slashing across Germany in lightning drives which the Wehrmacht seems incapable of stemming, it is time to check progress on V-E Day plans which are of special concern to business.



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A "hard peace" is still definitely in the cards for Germany.

But in Washington a bold new concept of economic control is beginning to take shape.

Based on the creation of a united front of the Western Allies (who have limited reparations demands compared with the Russians), the plan would run German industry in the British-French-U. S. control area like a single great corporation charged with the responsibility to:

- (1) Fill prescribed reparations payments to all Allies in the form of goods and raw materials.
- (2) Reshape the industrial economy to meet the Allied dictum that Germany be made industrially incapable of rearming.
- (3) Provide employment so as to avoid disorder, especially during the early months of occupation and reorganization.

Originators of the new proposal would first create a Western Allies Commission, including official representatives of Britain, the U. S., France, Belgium, Holland, Denmark, and Norway.

This commission would, in turn, select an executive committee of officials charged with creating and carrying out a detailed scheme of economic reorganization and a schedule of reparations payments.

And the executive committee would name a single administrator—who almost certainly would be an American.

While Russia, so far, is not included in the plan, Moscow is said to have sanctioned the idea and to have hinted that such centralized handling of the other Allied zones would make coordination with the Soviet-administered area much simpler.

U. S. sponsors of the plan are reluctant to draw any parallels between their highly coordinated control plan and the organization of the Tennessee Valley Authority in this country.

But in England, Sir Walter Citrine has already pointed out the similarity—and urged that an international TVA be created to control German industry.

Britain's reaction to the proposal is seriously divided.

Certain of its big industrialists, alarmed at Russia's growing productive power and at mounting U. S. antipathy toward cartels, dread the loss of strong German partners in their world cartel program.

Others welcome the scheme because they believe Britain can grab some of the German export markets formerly controlled by:

- (1) Industries now likely to be liquidated because of their war potential.
- (2) Industries whose capacity to export is likely to be restricted by reparations payments.

But the mass of British industry is expected to buck the plan if it curtails too drastically long-profitable German outlets for British goods.

The Allied Reparations Commission will not convene in Moscow before the

GE 111

THE WAR AND BUSINESS ABROAD (Continued)

BUSINESS WEEK MARCH 31, 1945

middle of April and will have no specific list of demands to hand to the Germans for at least two months after the representatives begin their negotiations.

Nevertheless, payments in kind have already started (BW—Mar.24'45, p112) and they can be stepped up as rapidly as new German territory falls into Allied hands.

Russia is not the only country preparing to demand large numbers of German workers as a part of the reparations program.

France and Belgium will use Germans to remove 100,000,000 land mines still claimed to be scattered along the coasts, roads, and in fields near the German border.

German labor will also be demanded to remove the massive steel and concrete barricades along the coast, and to clear up the rubble in badly battered ports and battle zones.

And Holland will request German workers to speed the rebuilding of dykes and draining of flooded areas.

The rapid approach of V-E Day is also responsible for the sudden decision to dispatch Bernard Baruch to Europe to make a quick survey of economic conditions in liberated territory.

Alarmed at the mounting evidence that the U. S. has not met its promises to help put French and Belgian industry in operation more speedily than has been the case, the President is utilizing the services of a venerable trouble-shooter to confirm stinging reports on the situation made by Leon Henderson, Judge Samuel Rosenman, and William Y. Elliott, and to help draw up a plan to remedy the situation.

Baruch's assignment is limited to liberated Allied territory, has nothing to do with Germany.

Despite bitter editorials in the British press and the sudden arrival of officials from London to explore the food controversy, there will be no lifting of the temporary United States restriction on shipments of fresh meat to England (page 17).

Canada will boost its British deliveries from 50,000,000 lb. to 250,000,-000 lb. of beef this year, which more than makes up for the reduction of 175,-000,000 lb. in lend-lease beef shipments during the second quarter.

British imports from the Argentine were never cut off, or even reduced, during the period of political friction when Washington stopped all shipping to Argentina.

This year's drastic drought in the River Plate area, however, is likely to curtail seriously the amount of meat that will be available a year from now.

Argentina's declaration of war against Germany had been anticipated by German firms in Buenos Aires. Since early in February they have been unloading stocks of goods in an effort to get ahead of the expropriation order.

Funds realized from these sales (tinplate was one of the largest items) have been invested in the names of non-Germans.

British trade interests, determined to take over markets conquered in recent years by aggressive German companies—particularly in the construction line—have been vigorously backing every local move to place economic and political pressure on the Germans.

PAGE 112

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World Clinic for Cotton

Committee representing producing nations has difficult job inding a formula that will avert cutthroat dumping of surpluses.

Inational commodity accord sought.

hen the International Cotton Ady Committee convenes in Washon next week it will face one of world's toughest surplus commodmolems.

will explore the possibilities of an mational commodity agreement to resented at a later date to a more dy representative international conce on cotton and perhaps other is commodities. It is not empowing of further than this.

ride Representation—The advisory mittee was created by the Internaal Cotton Meeting, which met pertorily in Washington early in Septer, 1939, but accomplished little use the shadow of war was then ening the Polish plains.

he committee includes representas of Turkey, Brazil, Peru, Mexico, ia, the Soviet Union, British and ach cotton exporting colonies, pt, and the U. S.

diay, despite unprecedented domesconsumption, the U. S. cotton carryr is near depression and prewar ks-above 12,000,000 bales. At the e time, increasing foreign produchas boosted other stocks of cotton if the world carryover figure is now and 26,000,000 bales—enough to sify the mills of the world for a year peak production levels. And there no mechanism operating to reduce s surplus.

The American approach to domestic pluses over the last dozen years has man acreage reduction of nearly without materially lowering output, to better farming on the best land. Export Subsidy—Before the war American exports of cotton were on the ds. From a 1927 peak of 9,041,000 is they slumped to barely half that me in 1938. An export subsidy now been introduced to bring United attes cotton prices into line with those foreign competitors in the export rickt.

During the war, foreign consumption foreign cotton has fallen perhaps % and the foreign carryover more an doubled. Not even the substantial placement requirements of liberated as and backed-up consumer demots elsewhere will make much of dent in this surplus.

The Alternatives—None of the world's oducing nations, least of all the nited States, can afford cutthroat

dumping of surpluses—yet that is a choice wide open to the U. S. with its current export subsidy program and its powerful congressional cotton bloc (BW—Aug.26'44,p120).

An alternative, presented to the House of Representatives agricultural subcommittee on postwar planning last December, would involve a long-range transfer of labor and land from high-cost cotton, mechanization of the Delta and southwestern plains cotton areas, industrialization of the South, and a tapering-off government subsidy program as lower-cost production caught up with the world market. Secretary of Agriculture Claude R. Wickard advanced this program and got some support from cotton growers (BW—Dec. 9'44,p26).

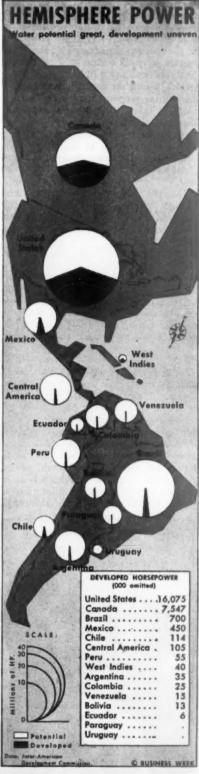
• The Planners' Hope—Certainly a more vigorous program of export subsidies would be promptly met by subsidies and tariffs imposed by competing foreign producers. It is exactly this type of economic warfare, at the root of many world problems before the war, which planners now hope to eliminate in postwar international economic agreements on commercial policy.

The solution of the problem through an international cotton agreement—similar to the 1937 sugar agreement, the 1937 coffee agreement, and the inoperative 1942 wheat agreement—is not as easy as it sounds, for the basis of control is hard to determine.

• Taking the Long View—Long-range plans to transfer production of basic commodities from high- to low-cost areas are behind the economic argument for commodity agreements, and are equal in importance to the desire to iron out violent fluctuations in production and price which act in the disinterest of both producers and consumers in the long run.

U. S. cotton interests play along with Washington efforts to transfer cotton acreage to other crops as long as high-yield cotton acreage, and hence high cotton production, can be maintained. On the international level, they can show that new foreign production has stolen traditional U. S. markets abroad and they can defend efforts to regain these markets. Even the government turns to this argument for defense of export subsidies.

• Interim Program—Somewhere along the way a compromise will have to be



Aim of U.S.-approved development programs in Latin America is balanced economic growth, with fuller utilization of hydroelectric potential essential to industrial expansion. sought. It will not be as simple as adding inches to shirttails. But it is true that higher levels of prosperity in the world a decade or so hence may require as much cotton as is now being produced and more (if synthetics don't steal a march on natural fibers). It is an interim program for dealing with a market-choking overproduction today that is needed.

And that is a role commodity agreements are designed to fill.

The trend toward such an agreement was gaining momentum before the

• On the Record—The International Cotton Meeting in 1939 recorded its approval of a cotton agreement but recognized that the war would not permit it to function. Then, in 1942, the Second Inter-American Conference of Agriculture in Mexico City approved a resolution favoring such agreements "especially in wheat, sugar, cotton, and coffee" and calling for international collaboration between "not only the producing and consuming countries of this hemisphere but also the producing and consuming nations of the entire world."

The point was reiterated last month at the Mexico City conference of hemi-

sphere foreign ministers.

It is a safe bet that any draft agreement studied by the International Cotton Advisory Committee will emphasize distribution control by quotas rather than by price—leaving the U. S. free to figure out how to meet world prices. And further, quotas will be set—as in the wheat agreement—by allocation of percentages of world exports rather than

in specific quantities of the commodity.

• Hurdles to Clear—The Washington talks of the advisory committee are likely to produce no world-shaking pronouncement, however, since any commodity agreement now has at least these hurdles to clear:

 Both consumers and producers must be adequately represented as signatories to the agreement and on its advisory and technical staff.

(2) The general principles governing all such agreements must be formalized at a general commercial policy conference scheduled for later this year.

(3) The relationship of such agreements to one another and to the social and economic council to be created as a part of the world security authority must be worked out.

Argentine Movies

Buenos Aires "Hollywood" fills gap caused by shortage of foreign films, but U. S. studios still dominate market.

BUENOS AIRES—Argentina is experiencing a war boom in its motion picture industry which is circumscribed only by the lack of raw film. The impact of war is responsible, with competition from European sources cut off and imports from the United States limited.

• Ample Capital Available—Whereas producers once could scrape together only a few thousand pesos to finance a film, today they do not lack capital, co-



This issue of Business Week and products of a half dozen No York firms—are scheduled to no the first American Airlines "A freighter" to Mexico City.

Stripped-down DC-3 plane carrying 5,800 lb. of freight car will leave New York Apr. I inaugurate an international commercial air-freight service white American Airlines calls the first its kind. Cargo will clear U. S. Customs at New York, and the plane will stop en route only full.

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operation of foreign directors and to nicians, or official government supp A number of studios modernized

A number of studios modernized a shops just before the war. Now the are six large studios established in miniature Hollywood near Buenos Artistas Argentinos Asociados, Antina Sono Film, S. A., Estudios & Miguel, Pampa Film, E. F. A. a Radio Cinematografia Argentina Luton.

• Hollywood Still Dominates—Althou Argentine producers have ambitiplans for exploiting the Latin-American for exploiting the Latin-American of Mexico (BW—Oct.144tp) and Chile (BW—Mar.25'44.pl14)—Hlywood pictures still dominate. In 19 releases numbered 373, of which 3 were American, 36 Argentine. Dut the first nine months of 1944, 2 American and 22 Argentine pictures shown.

FLOF

After the United States and Bm Argentina has the largest number movie theaters in the Western Ha sphere. There are 1,611 theaters seni a population of 14,000,000, and 3 are in Buenos Aires and suburbs. More than 60,000 persons are employed theaters, and capital invested in the runs to \$105,000,000.

• Low Production Costs-Local products consider their films second only



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Hollywood productions, but their production costs are nearer to those of Mexico. Average films run from about \$45,000 to \$60,000 except for the 'extravaganzas" which cost as high as \$125,000. Income on pictures is high, two extravaganzas having grossed between them more than \$500,000.

Like Mexico, Argentina has its favorite star who shines brighter than all others. In Mexico, it is "Catinflas," the comedian-owner-producer; in Argentina,

it is "Catita," a comedienne.

• Reproduce U. S. Hits-Argentina claims to have Latin America's best motion picture laboratories, of which there are five: two studio-owned, three independent. The biggest, Laboratorios Alex, is responsible for making the Spanish version of such famed U. S. films as Walt Disney's "Fantasia,"
"Pinocchio," and "Dumbo." Alex also
processed Orson Welles' shooting of
Rio de Janeiro's "Carnival."

Apart from processing most of Argentina's features and newsreels, Alex has made most of the release copies of Hollywood negatives, although this business has been sharply curtailed by shortage of raw film. For local producers the shop operates on a 24-hour basis developing studio negatives and rush prints so directors can see results of one day's shooting before starting the next.

In a desperate effort to alleviate the film shortage, Alex is now busy reclaiming cuttings of stock films by removing the emulsion and recoating the celluloid. The reclaimed film is satisfactory for rush prints but not for releases.

o Shortages Limit Profits-Since 1932 Argentina has produced 375 featured titles, with an output peak of 56 in

Producers claim they could treble output if they could get raw film. The industry normally consumed 37,000,000 ft. of raw film a year but could get only 9,000,000 ft. from the U. S. last year to produce 26 features. With an eye on an early end of the European war, producers are laying optimistic plans for new productions later this year.

Despite wartime shortages, studios have made tidy profits. One firm, Argentina Sono Film, S. A., capitalized at \$1,100,000, cleared \$468,000 in 1942; another, Radio Cinematografia Argentina Lumiton, netted \$148,000 in 1943. • Under Compulsion-As in many Latin-American countries, Argentina compels the showing of national features and newsreels.

Each program must include one newsreel (usually these reflect an official line), and in August, 1944, theaters of two categories (according to location and size) were obliged to exhibit one national picture during seven days out of every 60, or 14 days out of every 35.

CANADA

Test in Ontario

Drew government's del means a provincial election will air national issues and shuffle partisan alignments.

OTTAWA-The political ten ture of Canada rose to fever level week as a result of the defeat of tario's Progressive Conservative gov ment in the provincial legislature

• Proving Ground?-The defeat for an early election in Ontario, sibly in advance of the imminent eral election, which may provide an ing for the arguments to be used national parties and a test of stren which may have an important bear on the national vote.

The Progressive Conservative adm istration in Ontario was a mino government which entered office an indecisive election a year and al ago. Its 38 supporters in a legislate of 90 enabled it to carry on only w the tolerance of the opposition m up of 32 Cooperative Commonwe Federation members, 16 Liberals, t Labor Progressives, and two indeper

• Hepburn Does It-Last week the position ganged up on Premier Gen Drew and passed a lack of confider motion to the tune of 51 to 36. T instigator of the move to oust Di was the Liberal leader and former (tario premier, Mitchell F. Hepbu who withdrew the passive support his party when Drew attacked the f eral government's Family Allowan legislation (BW-Feb.3'45,p113).

No major issue has yet arisen between the three principal parties in the princial field, but the Ontario election may be expected to show:

(1) What chance the C.C.F. has gaining control of the federal gover

(2) Which of the two traditional pa ties the right-wing voters will support if it is a case of uniting behind one them in order to defeat the C.C.F. • How It Came About-Ontario vota in the summer of 1943 gave the le wing C.C.F. its first big boost in Can dian politics by making it the office opposition when they turned out Liberal administration. Later C.C. captured the Saskatchewan gove ment (BW-Mar.10'45,p110). The 0 tario vote was small and lethargic

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12), t overni redits 116) 00,00 nit pu estora conor Iten und heat. nedic and a large bloc of nonpartisan is interested only in stopping the F. may be expected this time to not one of the two old-line par-

The Drew administration's most nole moves since coming into office been the introduction of Biblehing in public schools and enlargeit of school grants for the purpose reducing taxation on real estate, ther is likely to provide a strong maign plank, and voting will turn the personalities of Drew and Hepn plus such national issues as the eral government's alleged fumbling manpower and conscription poli-

War Factors-Ontario is a strongly war and proconscription province, Drew can be expected to capitalize the Ottawa Liberal government's glove treatment of isolationist and

heonscription Quebec.
The C.C.F., led by Edward Joliffe, ronto lawyer, drew heavy backing in distrial areas at the last provincial ction and has solid affiliations with

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folifie's campaign will stress the calistic features of the C.C.F. promin relation to industry, public utilis, and national resources, and the coentive features of its agricultural agam. It will hold that private enpise cannot assure full employment, ble farm prices, and postwar prosper, and that without government internation in economic affairs a postwar pression is inevitable.

Brilliant Campaigner—Hepburn, a

Brilliant Campaigner—Hepburn, a mer and a brilliant campaigner with ong rural backing, will attack the wemment's war program along strict

nservative party lines.

Drew, a veteran of the last war and ighly popular with veterans and solers, will appeal for a chance to carry at his program. He will charge the position with responsibility for a redless wartime election and offer his arty as an alternative to socialism the one hand and irresponsible leadship on the other.

ANADA LENDS TO CZECHS

As anticipated (BW-Sep.30'44,p 12), the first direct loan to a foreign overmment under Canada's Export credits Insurance Act (BW-Aug.5'44, 116) went to Czechoslovakia. A \$15,00,000 credit has been created to permit purchases of supplies needed for the estoration of the Czechoslovakian conony.

Items likely to be purchased with the und include metals, asbestos, mica, theat, hides, pulp, special woods, and

nedical supplies.

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CAMPBELL, WYANT & CANNON FOUNDRY CO. Agency—Bobel and Waldle and Briegs THE PHILIP CAREY MFG. CO. 82 Agency—Roy & Duretine, Jos. CELANESE CELULIOID CORP. 109 Agency—Iver & Etilington, Inc. 77 Agency—West-Marquis, Inc. 77 Agency—West-Marquis, Inc. 78 COMMONWEALTH OF PENNA. 33 Agency—Ketchum, MacLeod & Grove, Inc. CONTAINER CORP. OF AMERICA. 62 Agency—N. W. Ayer & Son, Inc. CONTAINER TESTING LABORATORIES, INC. 104
Agency-Bohel and Waldie and Briggs
Agency-Roy S. Durstine, Inc.
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CLAYTON MFG. CO
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Agestey-N. W. Ayer & Son, Inc.
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CRANE CO. 87 Agency—The Buchen Co. CURTISS WRIGHT CORP. 41
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Agracy Franklis Spier, Inc. FLINTKOTE CO. Agency—Marschalk and Prast Company FRUEHAUF TRAILER CO. Agency—Schipper Associates GAYLORD CONTAINER CORP. Agency—Oaklelgh B. Franch & Assoc. GENERAL ELECTRIC CO. 14 Agency—Leighton & Nelson THE B. F. GOODRICH CO. 15 Agency—Leighton & Nelson THE B. F. GOODRICH CO. 26 GRAYBAR ELECTRIC CO. 34 Agency—Horton-Noyes Co. GULF OIL CORP. 11 Agency—Horton-Noyes Co. GULF OIL CORP. 11 Agency—Toung & Bubleam, Inc. 12 Agency—McCann-Erickson, Inc. 42 Agency—McCann-Erickson, Inc. 43 Agency—Boche, Williams & Cleary, Inc. WALTER E. HELLER & CO. 103 Agency—Leon Invingston Adv. Agency Agency—Leon Invingston Adv. Agency Agency—Laon Invingston Adv. Agency Agency—Abobot Kimball Co., Inc. HORNSLOWER & WEEKS. 78 Agency—Abobot Kimball Co., Inc. HYATT BEARINGS DIV. GENERAL MOTORS CORP. Agency—Campbell-Ewaid Co., Inc. Eastern Div. IRON FIREMAN MANUFACTURING CO. 8 Agency—Campbell-Ewaid Co., Inc. Eastern Div. IRON FIREMAN MANUFACTURING CO. 8 Agency—Campbell-Ewaid Co., Inc. Eastern Div. IRON FIREMAN MANUFACTURING CO. 8 Agency—Campbell-Ewaid Co., Inc. Eastern Div. IRON FIREMAN MANUFACTURING CO. 8 Agency—Dersenus & Gofter Co.
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FARRAR & RINEHARI, INC. Agency—Franklin Spier, Inc. FLINTKOTE CO. Agency—Marzehalk and Pratt Campany FRUEHAUF TRAILER CO. Agency—Schipper Associates GAYLORD CONTAINER CORP. Agency—Oakleigh B. French & Assoc. GENERAL ELECTRIC CO. 14 Agency—Leighton & Nelson. THE B. F. GOODRICH CO. 15 Agency—Leighton & Nelson. THE B. F. GOODRICH CO. 49 Agency—Journe & Bublean. Inc. GRAYBAR ELECTRIC CO. 34 Agency—Horton-Noyes Co. GULF OIL CORP. 11 Agency—Young & Bublean. Inc. JOHN HANCOCK MUTUAL LIFE INS, CO. 85 Agency—Mechans-Erickson. Inc. HARDWARE MUTUAL CASUALTY CO. 36 Agency—Mechans-Erickson. Inc. WALTER E. HELLER & CO. Agency—Roche. Williams & Cleary. Inc. JOSHUA HENDY IRON WORKS. 43 Agency—Leon Livingston Adv. Agency R. M. HOLLINGSHEAD CORP. 49 MORNBLOWER & WEEKS. Agency—Joseph R. Gerber Co. HORNBLOWER & WEEKS. Agency—Joseph R. Gerber Co. JOHNSON & HIGGINS. 175 Agency—Joseph R. Gerber Co. JOHNSON & HIGGINS. 170 Agency—Joseph R. Gerber Co. JOHNSON & HIGGINS. 171 Agency—Joseph R. Gerber Co. JOHNSON & HIGGINS. 175 Agency—Doremus & Co. HE KAYDON ENGINEERING CORP. 58

KIDDER, PEABODY & CO
Agency-Doremus & Co.
Agency-Foote, Cone & Belding
Agency—Albert Frank-Guenther Law, Inc.
Agency—Samuel C. Cross Co. Inc.
LEAR, INC
KIMBERLY CLARK CORP. 59 Agency—Foote, Cone & Beidling KUHN, LOES & CO. 102 Agency—Hotel Frank-Guenther Law, Inc. GEORGE LaMONTE & SON. 3 Agency—Bamuel C. Crost Co., Inc. LEAR, INC. 55 Agency—Arthur Kudner, Inc. 118 Agency—Doremus & Co. MAINE DEVELOPMENT COMMISSION. 8 Agency—Brooks, Smith, French & Detrance, Inc. THE MALL TOOL CO. 74 Agency—Chas, Elwyn Hayes, Adv. MANNING, MAXWELL AND MOORE, INC. 56
MAINE DEVELOPMENT COMMISSION 8
Agency-Brooks, Smith, French & Dorrance, Inc. 74
Agency—Chas, Elwyn Hayes, Adv.
INC. 56
MARSH STENCIL MACHINE CO
Agency—Briggs & Varley, Inc. MARSH STENCIL MACHINE CO
Agency J. M. Mathes, Inc.
Agency—J. M. Maliles, Inc. McSEE CO. 76 Agency—J. B. McGirena & Co., Inc. MONROE CALCULATING MACHINE CO. 37 Agency—Aller & Richards Co. MONSANTO CHEMICAL CO.
Agency—Alley & Richards Co.
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Agency—McCann-Erickson, Inc.
NATIONAL MOTOR BEARING CO., INC. 106
NATIONAL STANDARD CO
NORTHERN PACIFIC RAILWAY CO 44
NORTON CO
NATIONAL MOTOR BEARING CO., INC. 106 Agence, L. C., Cole, Adv. NATIONAL STANDARD CO
Agency-Short & Baum, Advertising
Agency—G. M. Basford Co.
Agency—John O. Powers Co
PENN ELECTRIC SWITCH CO
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PACKAGE MACHINERY CO. 102 Agracy John Q. Powers Co. 6 PENN ELECTRIC SWITCH CO. 6 Agracy The Buchen Co. 60, 61 Agracy Al Paul Lefton Co. Ine. THE PFAUDLER CO. 94 Agracy Charles L. Rumrill & Co. 105 Agracy Oakleigh R. French & Assoc Turing CO. 92 TURING CO. 92
Agency—Oakleigh R. French & Assoc. PULLMAN-STANDARD CAR MANUFAC-
TURING CO. 92 Agency—Charles Daniel Frey Co. 71 Agency—Sutherland-Abbost SAN 1055 CHAMBER OF COMMERCE 94
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SIMONDS SAW & STEEL CO. 39
Agency—The Bayless-Kerr Co. THE SOUNDSCRIBER CORP. 44
Agency—Erwin, Wasey Co., Inc.
Agency-Roche, Williams & Cleary, Inc.
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UNIVERSAL PICTURES CO., INC
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Agency—The Griswold-Eshleman Co. WAVERLY PETROLEUM PRODUCTS CO. 38
Agency—Gray & Rogers
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3. S. WHITE DENTAL MFG. CO 53
Agency-Peterson & Kempner, Inc.
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Agency—Peterson & Kempner, Inc. THE WHITE MOTOR CO
WESTER ELECTRIC CO

Universal Pictures Company, Inc.



The Board of Directors has declared a quarterly dividend of 50c per share on the outstanding stock of the Com-pany, payable April 30, 1945 to attackholders of record at the close of business on April 16, 1945.

LOEW'S INCORPORATED THEATRES EVERYWHERE

March 9, 1945

THE Board of Directors on March 8th, 1945 declared a dividend at the rate of Soc per share on the outstanding Common Stock of this Company, payable on the 31st day of March, 1945 to stockholders of record at the close of business on the 23rd day of March, 1945. Checks will be mailed.

DAVID BERNSTEIN, Vice President & Treasurer



CUT our shipping room costs \$600 a year," claim users of Marsh Stencil Machines, Brushes, Inks! Three sizes to meet Gov't Spec., 1', 5/4", 1/2". For sample stencil, shippers' handbook and prices, pin this to business letterhead, with your name.

MARSH STENCIL MACHINE CO. 58 Marsh Bldg., Belleville, Ill., U. S. A.



Reduce accidents in your plant and reduce your insurance rates. As a mutual company with only our policyholders' interests to serve, we help you do this. Our Safety Engineering service is noted for its achievements in saving thru accident prevention.



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THE MARKETS

FINANCE SECTION-PAGE

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For a time late last week there was a definite lifting of the selling pressure previously characterizing most New York Stock Exchange daily trading sessions in March, and many stock market observers almost allowed themselves to be beguiled into thinking that at least a technical rally might be in the making

• Retreat Is Resumed-Such thoughts soon died. Instead, trading volumes started to drop off as prices firmed up. The "rallies" proved timid affairs. These unfavorable technical signs, moreover, weren't unnoticed. By Saturday the retreat to lower price levels not only had been resumed again but also was acquir-

ing some additional momentum.

Week-end musing by market participants over the uncertainties business will face when the war in Europe ends didn't tend to improve market sentiment. Further deterrents were new reports of the spread of official Washington concern over stock market prices and the stock exchange's new order calling on members to provide more complete data on the amount of credit being used to finance market trading (page 78).

• Prices Drop Sharply-Monday's exchange proceedings, as a result, saw prices experience one of their worst shellackings of 1945. Such heavy liquidation ensued, in fact, that market values of many issues, including blue chips, quickly tumbled \$1 to \$3, or even more. Only 61 of the 980 issues changing hands that day on the Big Board could finally boast of having moved counter to the trend.

Since Monday the market has done much better pricewise, and by the close of trading on Wednesday a fair part of this week's earlier losses had been regained. Activity dropped off very share after the trend shifted, however,

Some observers think that the n persistent decline of shares generally been mainly due to fears aroused Washington threats to curtail stock a ket activity. They feel certain, also, the Federal Reserve Board will soon cree 100% margin requirements, until this question is settled they en little drastic change in prices on up-side

Changes-Other ast Psychology market students, however, believe the another equally important factor is change in investor psychology regardi the war's end in Europe. They say the many investors aren't so certain now to a year to 18 months will clapse between victory in Europe and in the Pacific a thus permit a gradual change-over the would cushion the potentially unfav able effects of reconversion on industrial

Instead, such investors are beginn to visualize a much shorter interval a a much sharper reaction from reconv sion. This is causing them increas worry, too, over the near-term sto market outlook.

Security Price Averages

,		Week Ago		Year Ago
Stocks				
Industrial .	131.3	134.6	138.5	1175
Railroad	48.3	50.6	51.5	40.1
Utility				
Bonds				
Industrial .	123:2	123.2	122.3	120
Railroad	114.5.	114.8	114.7	104
Utility	116.4	116.4	116.4	116

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



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uch of the amazing advance in the and of living of the average Amerin the last century can be traced proved application of scientific oles to the tools and materials

which we work.

war it has been demonstrated that never military stockpiles are drawn more rapidly than they are reished, generals and admirals must e their plans, and final victory is d. That is equally true of the tific stockpiles that must prothe basis for further improvement living standards. Contrary to a ewhat general impression, they are built up in war, but, rather, are deed. The condition may not yet be ming, but it is serious enough to apy the attention of many who are ed in research and scientific edu-

On the occasion of the 25th anniverof the founding of the Standard Development Co., a forum was ducted to obtain a cross-section of dified opinion concerning the needs the postwar years. The papers and cussions have just been published der the title of "The Future of Instrial Research." In a postscript, gene Holman, president, Standard Co. (New Jersey), makes the signifit point that-

The demonstrated capacity of the nafor production and service is far above prewar level. The new factor which ed the basis for this result is technoical progress and its engineering appliions. This progress, in turn, resulted m industrial research, more than from other single factor. . . . But industry is I far short of meeting, or fully underding, its own needs for research, and nation as a whole is still farther from

The most important immediate probas are training more research specialists, iging the country as a whole to a better nderstanding of research, and working out permanent liaison between industrial re-

ch and the military forces.

When Standard Oil decided to conentrate all of its research in one develpment company, a quarter of a century go, large-scale industrial research was till something of a novelty. By 1940, merican industry was spending about 00 million dollars annually, and emloyed 70,000 scientists. The war unoubtedly has increased both expendiure and employment, but much of the work since 1940 has been on solving immediate problems of a military nature.

The late Thomas Midgley, Jr., once remarked that the rapidity of growth of industrial research in the last 25 years was largely a "catching-up" process, because the birth of industry in America had occurred many years before. The value of this concentrated effort in providing a stockpile that could be converted to war use is evident. It is entirely possible that some of the wardeveloped research will have practical applications in peace. But there has been an obvious drain on the storehouse of knowledge that will be of the greatest value to the postwar consumer because of neglect of pure research and the decline in the stockpile of scientific manpower.

Educators and industrialists agreed that the future of research is dependent on the number of first-class men and women that can be turned out by the schools of science. Yet most of the young men mentally qualified to become the scientists of the future have been called to arms. Few of them will be as well qualified for scientific work when they again don civilian clothes because of limited opportunity to study and to exercise their skills while in uniform.

Even the pessimists seem agreed that the most difficult industrial reconversion problems can be solved within six months to a year after war production is discontinued. But educators point out that it will take from four to six years to get the production line of adequate scientific training rolling.

If industry endeavors to fill the gap by drawing upon the academic scientist engaged in teaching prospective replacements for the scientific manpower stockpile, or calls upon the laboratory worker to drop his broad studies of fundamental problems, the store of scientific knowledge upon which industrial research must draw in the future will be further depleted, and another potential crisis created.

The nation has learned the dangers of permitting military research to lapse between wars. Industry recognizes its obligation to continue the study of the problems of national defense in time of peace. But there is equal need for recognition by all of the people of the cost of lapses in industrial research. Constant addition to the stockpile of knowledge would appear to be one of the first requisites of a continuing campaign to raise our living stand-



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THE W. W. SLY MFG. CO. Cleveland 2. Ohio



THE TREND

THE GOLDEN GATE TO PEACE

If you had been in the last World War and had come out of it into what looked like the dawn of a new world—at least for those bright months between the Armistice and the Versailles Conference—and if you had a son in today's war you might want to write him a letter of warning and encouragement about this surer dawn that they are now trying to unveil at San Francisco.

• If you did, you would have to start by telling him that you knew that he wasn't coming to the break in his own generation's long night with any of the wide-eyed expectancy of a fresh start that you had on that 1918 Armistice Day. You would realize that there was no point in reminiscing about the wonder with which you said to yourself, "I'm actually going to live to see what it will be like," and, by "it," meant indefinable precedentshattering things, new freedoms, and a release for all the potentialities that, for a short moment, a young man could then feel in a plausibly young world. Any brief regret that man's reach had so shortened in the ensuing quarter-century that your son would not touch that fine, false moment, would be brushed away by the assurance that neither would he come to the bitterness of discovering that it was only a moment and that a whole generation had overreached.

You could write him that, perhaps, he had a sound hope where you had a futile promise. For, this time, you might say, we have started meanly, humbly, recognizing among the ingredients of our recipe for international concord the fears, jealousies, ambitions, and arrogancies of nations that have been proved capable of war and only possibly capable of peace. We start frankly with what we have had in war—an alliance of what the war has shown to be the three most powerful nations of the earth—and we seek to add at San Francisco a yeast that will slowly convert it into a true world organization.

• You might write this son that, most important for his hopes of San Francisco, we intend to bring out on the conference table there, and deal with, the fact that these three nations rest their alliance on a mutual recognition that each has staked certain minimum claims to the world on which it demands hands off and certain marginal claims which it will leave to the test of its competitive persuasiveness.

Any young man, you might add, should be able to recognize how far the United States has staked out the Western Hemisphere, Russia the eastern side of Europe, and Great Britain its Empire and the ancient posting stations on the highways of that Empire. Any young man should be able to read the meaning of Great Britain's readiness to fight Russia's friends in Greece, of the Allies' deference to Russia in Poland, and of the way in

which the Monroe Doctrine was realistically embrace and even crushed to Latin bosoms at Chapultepec. As young man might guess at how carefully the pattern of priorities has been drawn down to the point where the great spheres of power will meet in conquered German and how firmly the precedents have been set for the eventual settlements in Asia.

• If actions did not speak more loudly than words, to might quote the Dumbarton Oaks directive for Sa Francisco with its Yalta-annexed plan for voting in the international organization's Security Council. Dumbe ton Oaks tells the story in its concentration of initiation in the Council, its required dependence of the General Assembly of all members on the recommendations of the Council, which the Allies will inevitably dominate, Yah rounds it out by the provision that each permanent men ber of the Council may alone exercise an absolute veh over any proposed military action by the international organization. And the permanent members of the Council are, for current practical purposes, the Big Threethe "Big Five" merely by courtesy of the Big Three a long as France and China are meagerly armed and still Great Powers in name only. This means not only that any one of the Big Three could veto proposed militan action against itself-which is immaterial beside the fact that such a proposal would inevitably end the great experiment-but that it could use that veto for the protection or persuasion of smaller nations and, thus, to block interference with its sphere of influence.

• If you had fought for something better than this a quarter-century ago, you might be moved to warn a son who was fighting today that, behind all the fine words, the plan looked no better than this, as of today. You might even say that it was many things that the League sought not to be—and then add that, for this very reason, San Francisco might eventually bring us something that the League never could be.

For, if we are to have peace, we must, first, preserve this alliance with which we frankly start. Only if we can preserve it at today's "practical" level, will we get the time to raise it to a higher level and merge it with a true world society. On this low foundation for the mutual accommodation of hardboiled political claims, we shall try at San Francisco to build an organization for attack on those economic ills and errors which are the root causes of world conflict. In this lies the greatest hope that, if we may not be too proud of what we shall, at first, give our sons for their sacrifice, they may yet live to feel the pride that began to die in us after Versailles.

The Editors of Business Week

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